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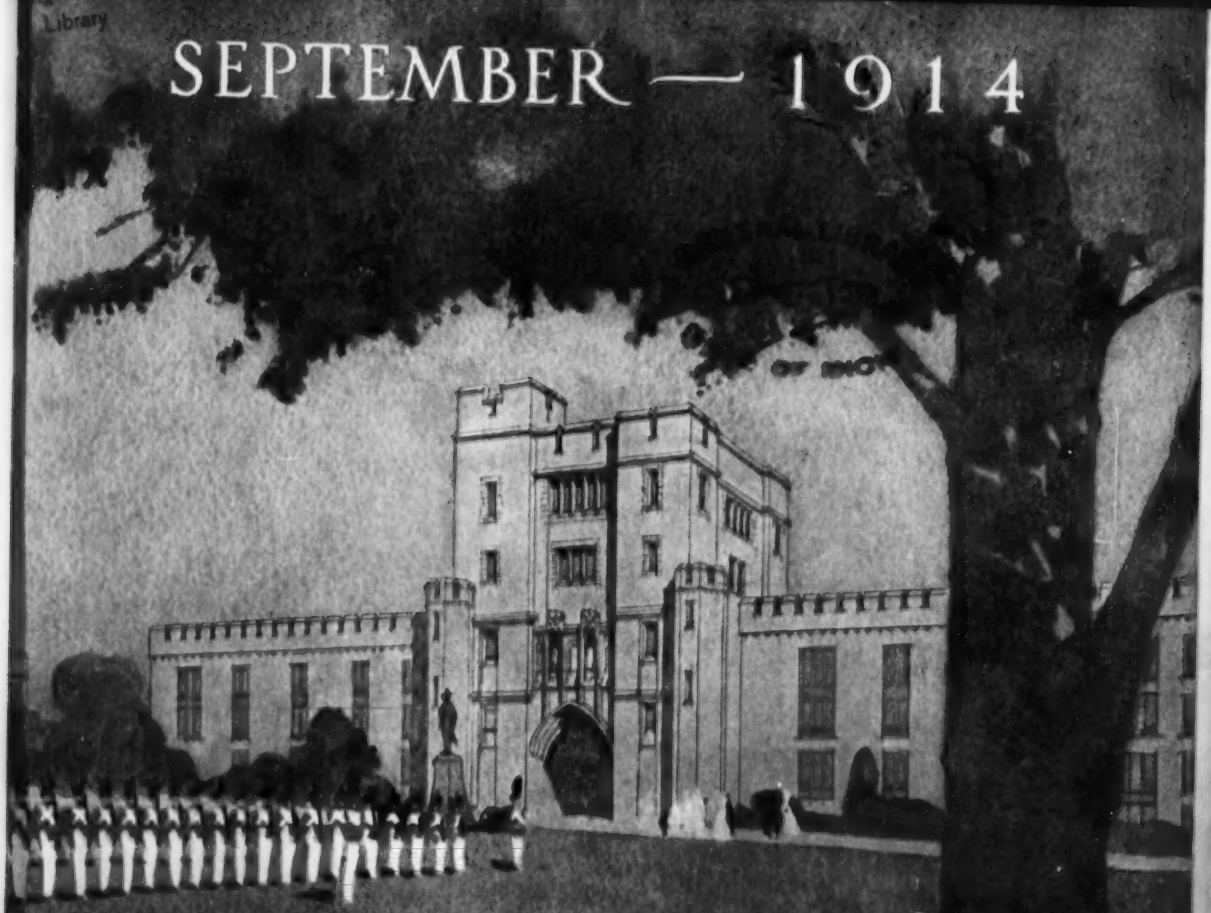

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THE ARCHITECTVRAL RECORD

SEPTEMBER, 1914

VOLVME XXXVI NVMBER III

FOVRTH PRESBYTERIAN CHVRCH of CHICAGO

CRAM, GOODHVE & FERGVSON, Boston, & HOWARD VAN DOREN SHAW, Chicago, *Associate Architects* By W A NICHOLS

AMERICA is the land of sects, and hitherto little success has been met in planning a church building which shall adequately represent the genius of Evangelicism. Indeed, few attempts have been made, architects generally being satisfied in creating a building which shall keep out the elements and keep in the artificial heat, and at the same time furnish happy acoustic properties.

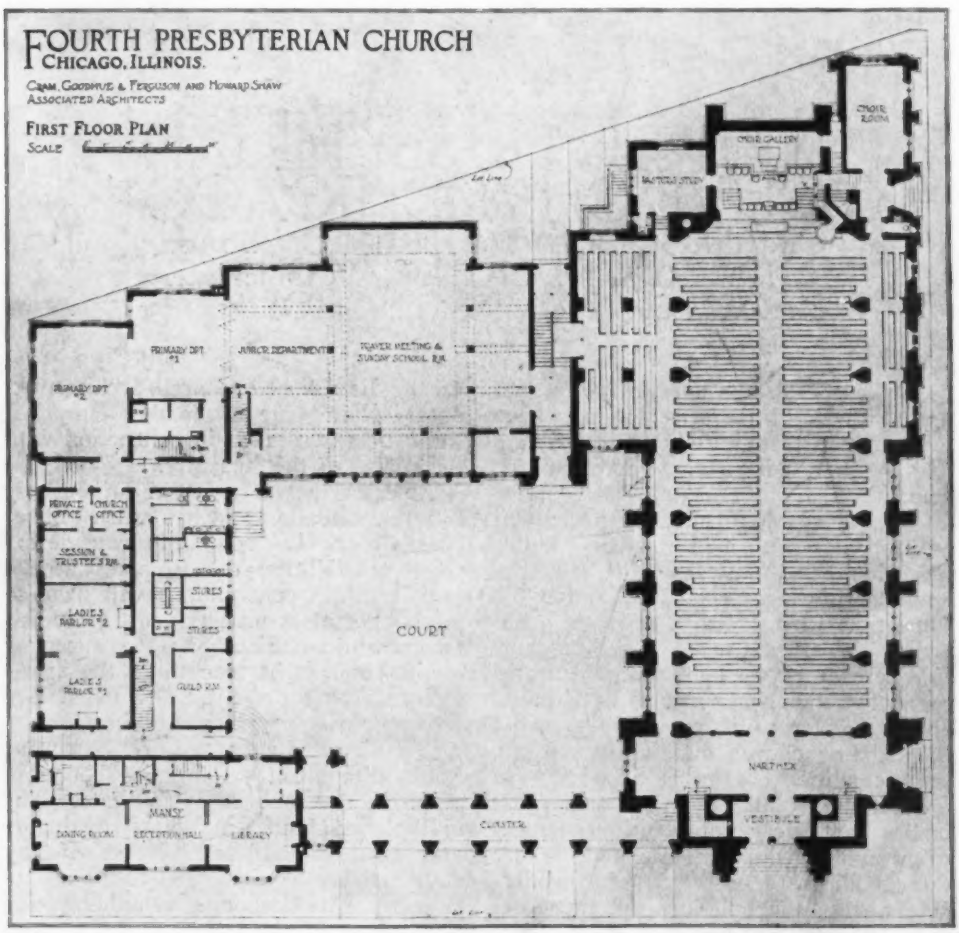
Wherever, on the continent of Europe, the state religion happens to be Protestant, the government has simply seized the existing church buildings, and the same condition obtains in Scotland. In Ireland and Wales the non-conforming bodies have very unpretentious houses of worship, while in England, where these bodies are possessed of considerable wealth, the buildings are more ornate, but such are generally poor copies of the Established Church architecture, or are plain structures with elaboration, fantastic when taken in connection with the genius of the structure.

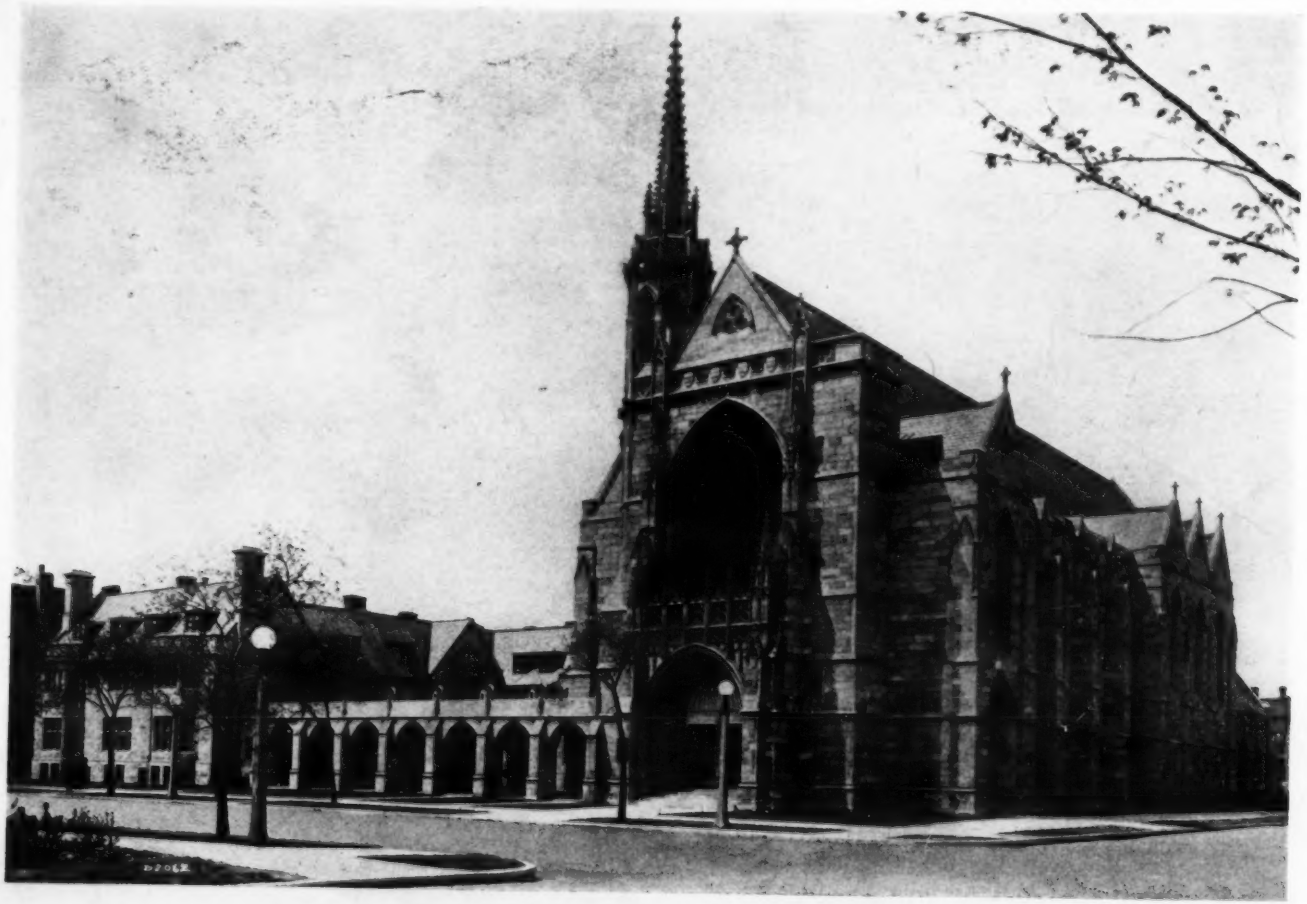
America, however, is in an entirely different situation and has much greater possibilities. Of course in considering these possibilities, the Roman Catholic and Anglican communions will have to be thought of as matters apart from this generalization. Each has a peculiar genius, and to be true to it, the architecture must represent a devotional idea already fittingly exemplified in Norman or Gothic, Romanesque or Byzantine lines. For all other Christian bodies in America the problem is intricate. The multiplicity of differing phases of dogma and discipline and the absence of any state religion have brought about an architectural hodge-podge in buildings for public worship ranging in design and

style from the "little red schoolhouse" variety to structures of pure Gothic or stately Norman exteriors with bare assembly hall interiors—the inside stultifying the outside, or the outside promising what the inside fails to produce.

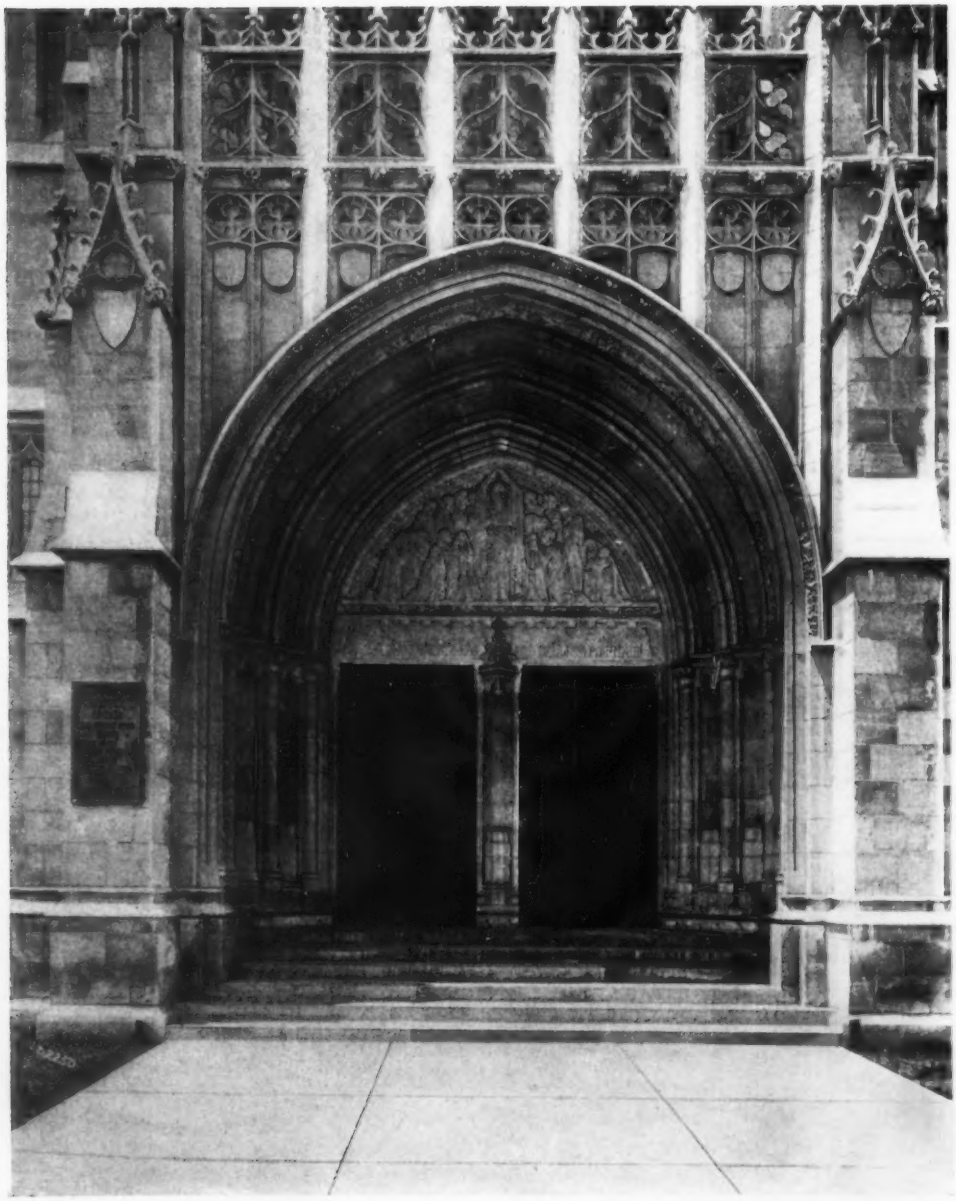
This condition makes the Fourth Presbyterian Church of Chicago, which with its auxiliary buildings and manse is the combined work of Cram, Goodhue & Ferguson, of Boston and New York, and Howard Shaw, of Chicago, as associated architects, more of an achievement even than would appear to the lay observer who simply sees and marvels at the grace, beauty and dignity of the plant. It is a living, breathing spiritful thing, representing exactly what it is, an Evangelical house of worship, not affecting some tenuous relationship with the Roman or Anglican faith, but honest and frank, a pioneer in the new movement back to Christian unity. This movement is a marked one and a tour of inspection over the drawing boards of architects who are prominent as church builders, will show the increasing tendency among Presbyterians, Baptists and the like to return to Catholic lines of architecture. Of this tendency the Fourth Presbyterian Church is a notable illustration.

Regarding the designing and planning it is hard to say where the ideas and architectural impulses of the associated architects began and ended and how they



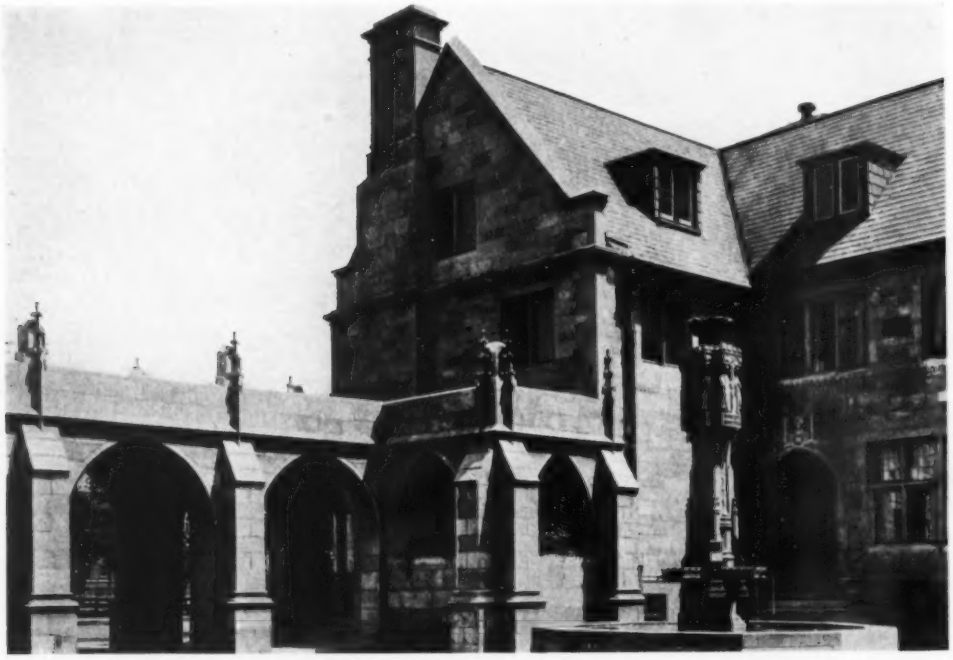


GENERAL VIEW OF FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.



MAIN ENTRANCE — FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.

FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.



VIEW OF MANSE FROM GARTH—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

LOOKING INTO THE GARTH—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

MANSE, CLUB BUILDING AND PRIMARY DEPARTMENT—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

ENTRANCE TO MEN'S CLUB—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
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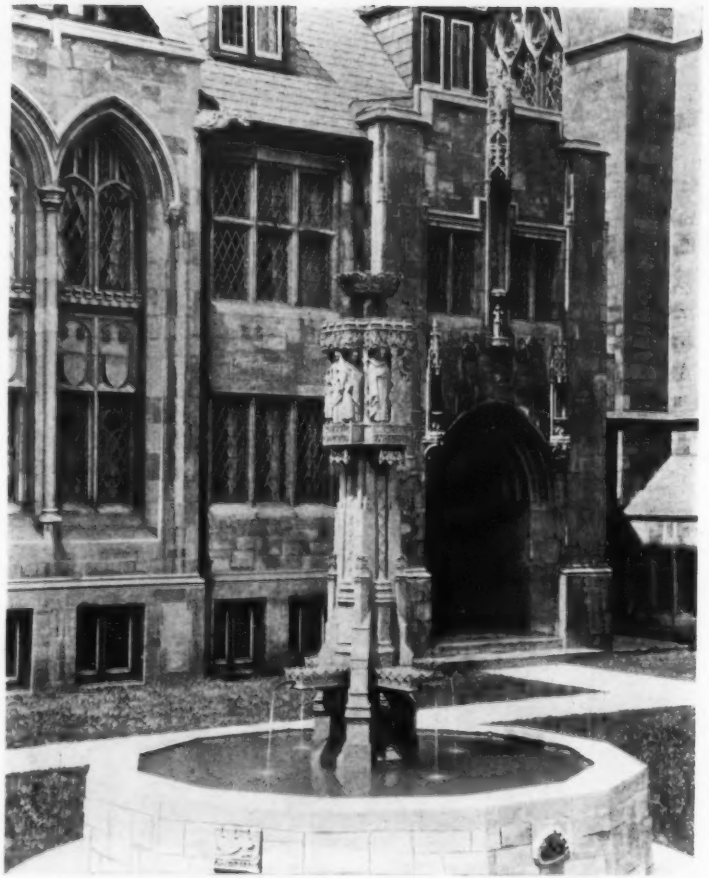
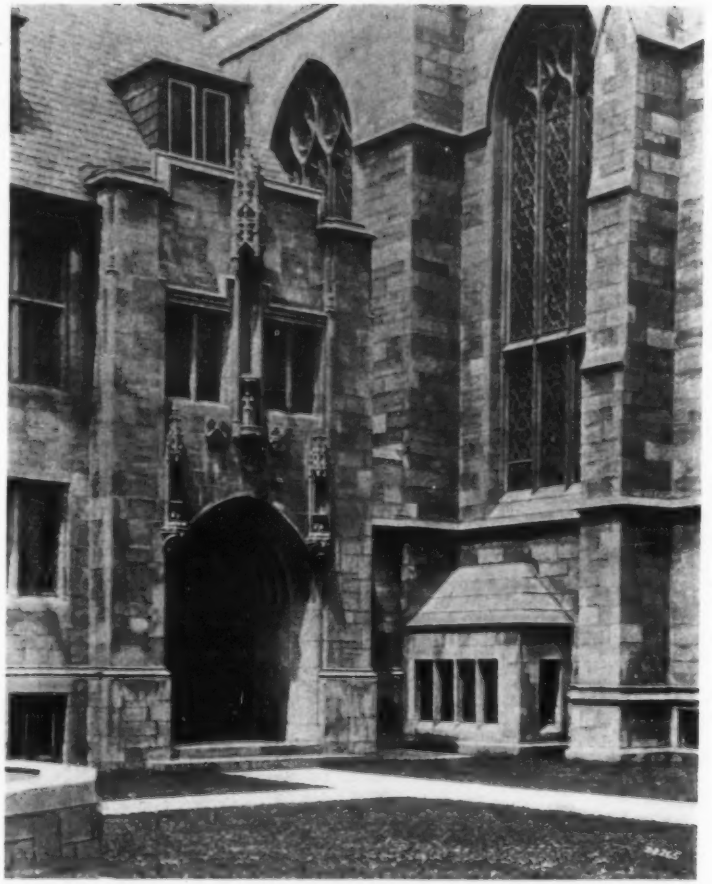


FOUNTAIN IN GARTH—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.

Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.



ENTRANCE FROM GARTH—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.

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Associate Architects.

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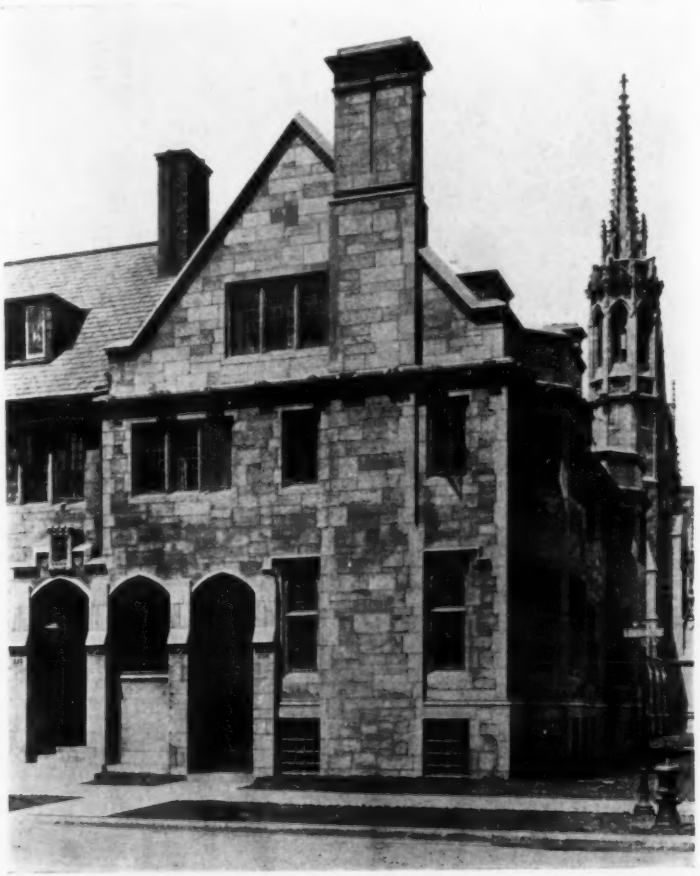
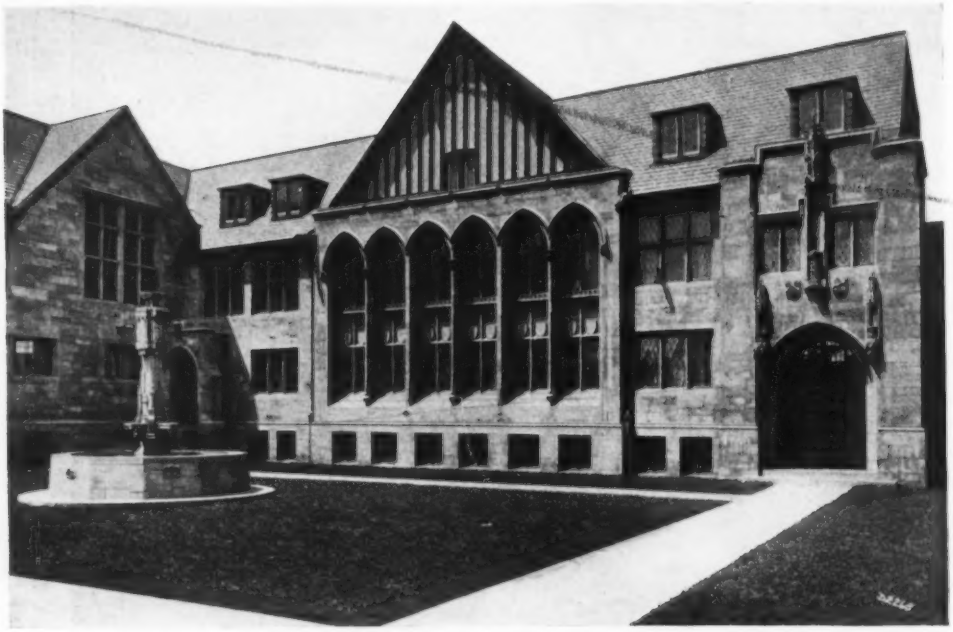
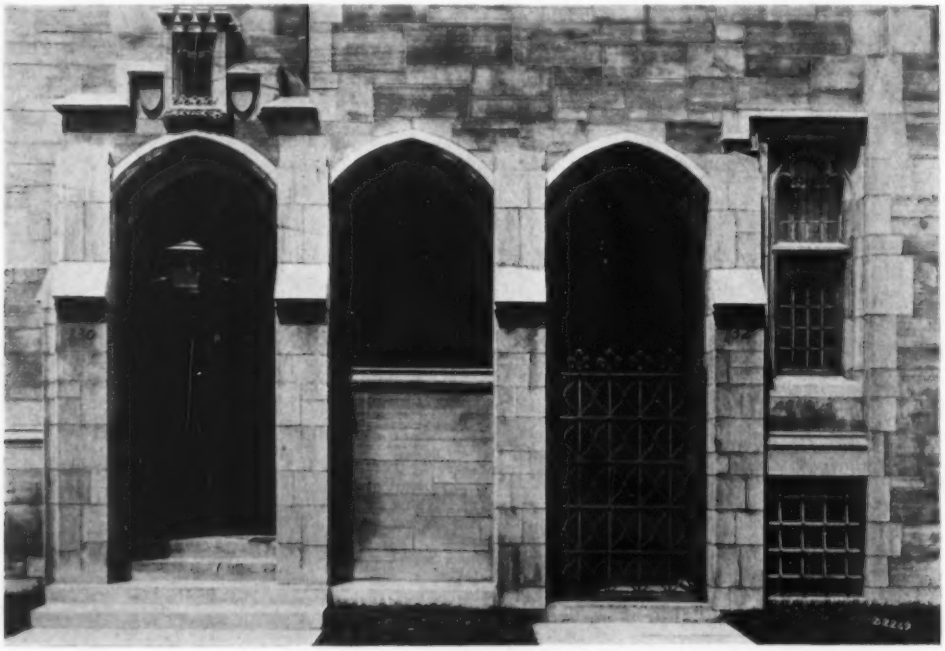


MANSE—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago,
Associate Architects.

SUNDAY SCHOOL—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago,
Associate Architects.



SUNDAY SCHOOL FROM GARTH—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.



ENTRANCE TO MANSE AND CLUB BUILDING—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

were merged. The formal division of the work was that the Boston firm was responsible for the church proper and the cloister, with the Chicago architect's endorsement; and the manse, Sunday school building and club rooms were planned in the Chicago office, with the Boston firm's endorsement. As a matter of fact there was no hard and fast division.

The church and group of buildings have been erected at a cost of between $400,000 and $500,000. Structurally it is as real as the old cathedrals of England, being built on the same genuine plan as was St. Thomas' Church in New York City. It is not a steel-frame structure, with a veneering of stone or other plastic material, but is real masonry and genuine to the last degree. Where there is design it is carved in the solid stone. Throughout the entire construction this plan of genuineness has been insisted upon—with the hearty cooperation of the building committee of the society for which the church was erected.

Following the idea of erecting something distinctive the architect of the church proper has abandoned what might well be termed the "Protestant scheme" of placing the organ in the chancel. There is always a jarring effect, upon entering a church, and before one may have a chance of feeling the devotional spirit, to have a set of organ pipes—generally more or less gaudily decorated, glare blatantly at one—practically declaring in the gilt, red and black coloring that the world, the flesh and the devil are the trinity to be worshipped in that building.

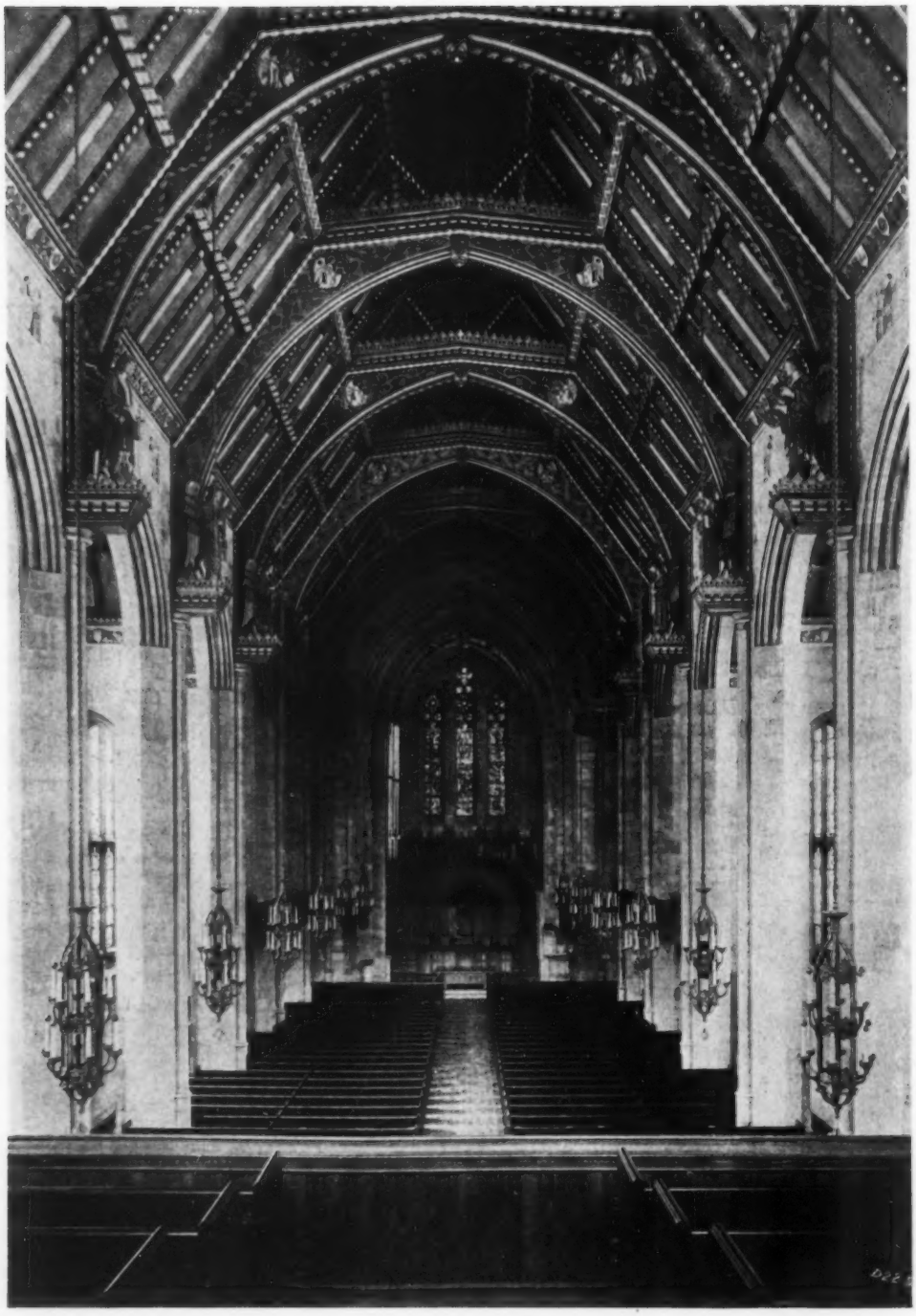
Instead the "east end" has a magnificent composition of communion table, pulpit, reading desk, and choir gallery. Here again the plan of realness is very marked. The communion table is frankly that and nothing more. It does not pretend to be an altar, and there is nothing in design or placing which will permit of such a misconception. It is raised two steps from the level of the nave, and occupies a space equal to the width of the central passage up the church. Immediately behind it is a row of seven seats, built sedilia-like, their high backs forming a parapet to the clergy stalls. The sedilia are simply panelled, as to the two groups of three on either end, with more elaboration in the carving of the central seat. A carved border, surmounts the sedilia, done in a grape design, suggesting the promise of sustenance from the Valley of Eschol, which Jehovah promised his faithful, and particularly appropriate as a symbol for the communion.

The central seat is surmounted with a baldachino which, at the same time, serves as a base for the reading desk in the parapet before the clergy stalls. The carving along the front of this desk is so delicate that each of the symbols of the three theological graces, Faith, Hope and Charity, stand out boldly in the cross, anchor and heart done in high relief.

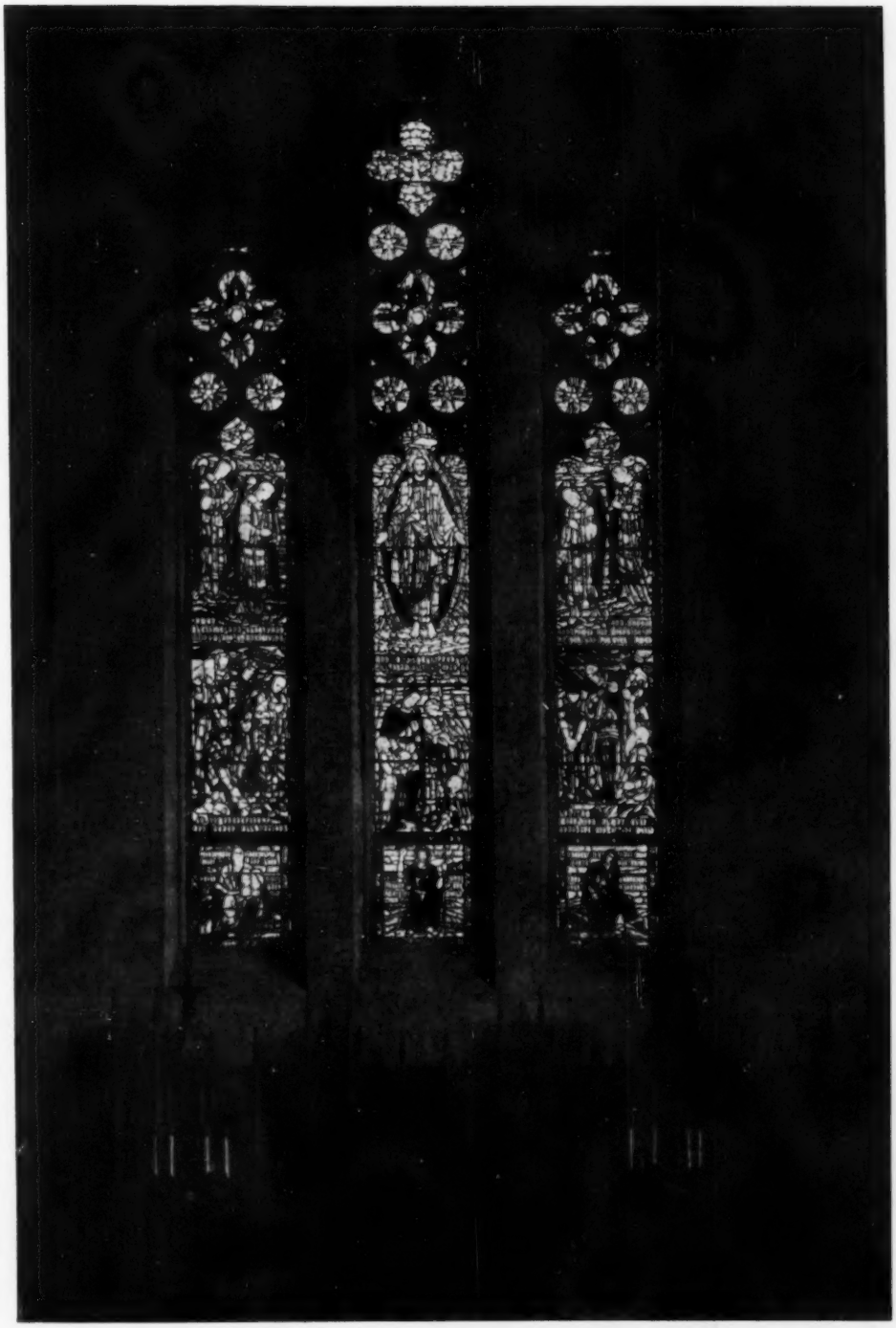
Back of the lectern, in the clergy pave, which has been reached by six handsome marble steps, is the pastor's seat, an exquisite bit of handicraft. This also is surmounted by a baldachino, which in its turn conceals the consol for the magnificent organ. The parapet behind the clergy stalls forms the front of the choir loft, while the organ is let into the solid masonry on the south wall of the chancel.

On the opposite wall, and leading from the clergy pave, is the entrance to the pulpit, which is set just outside the chancel arch, on the "east" wall of the pave. This entrance, which is let into the masonry, consists of a flight of granite steps, the recess containing them being set off from the chancel by a simple but dignified stone screen, and leads up to a piercing in the wall behind the handsome stone pulpit.

This is octagonal in shape and is mounted on a pedestal of similar arrangement. The panels of the pedestal are composed of deep beadings topped with flattened Gothic finials with a border of conventionalized leaves on their stems carved in the stone. Each of the panels of the pulpit proper contains a blazon on a simple shield, with the symbols of archangels, and the four evangelists surcharged, the whole series being



VIEW FROM GALLERY OVER NARTHEX—FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.



CHANCEL WINDOW—FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.

DETAIL—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

laid over a high relief design, the prevailing item of which is the Tudor rose. Around the whole top is a strip bearing the same decoration as that which is carved in wood above the communion pave sedilia.

An important feature in such a chancel arrangement as that which has just been described is that it eliminates, as said before, the aggressive organ pipes, and makes possible the display of one of the most beautiful "east windows" anywhere to be seen in the Middle West. This window is, first of all, an achievement in deep, true tones of pure color, a luminous blue predominating. The rich vibrant quality of this color is accounted for in great part by the fact that glass, made in heavy slabs, as was the famous thirteenth century glass, has been used. The substantial lead lines, well distributed, and the use of heavy iron bars greatly enhance the jewel-like decorative effect. The window throughout is a consistent decoration, as distinguished from those treated pictorially.

It contains three large lancets with tracery, and was designed to symbolize the redemptive power of Christianity. The central theme is announced by the figure of Christ in the upper part of the centre lancet, and from this figure rays in warm greens and golds radiate, entering the other lancets, thus adding to the coherence of the group as a whole.

Underneath the figure of Christ are the words "And I, if I be lifted up, will draw all men unto me," and the lower portions of the three lancets contain groups illustrating the far reaching import of these words. In the left lancet are figures representing different nations of the earth, richly robed in glowing colors; in the centre a family group, and in the right hand panel figures suggesting different stations in life, the king, the soldier, the working-man, and the beggar. Angels in adoration occur in the upper parts of the left and right lancets.

In the upper centre quatrefoil of the tracery is the descending dove, symbolizing the Holy Spirit, while cherubim and stars occur in quatrefoils and other tracery.

In the bases appear figures of Moses, Saint John the Baptist, and Isaiah, whose teachings and prophecies paved the way for the Divine Consummation suggested by the window as a whole. Practically all the other windows in the church, being harmonious parts of the lay-out, and all of one composition, are of a beautiful grisaille.

In general arrangement church, manse and other buildings are most ingeniously laid out. The lot is a truncated right angled triangle and the church is situated in the right angle. This brings the rear of the building against the hypothenuse and advantage has been taken of every bit of ground. The choir-room extends nearly thirty feet beyond the "east" wall of the chancel, giving ample space for this room and allowing for a wide entrance for the singers, who may thus reach their places in the choir loft by a concealed stairway without passing through the church proper.

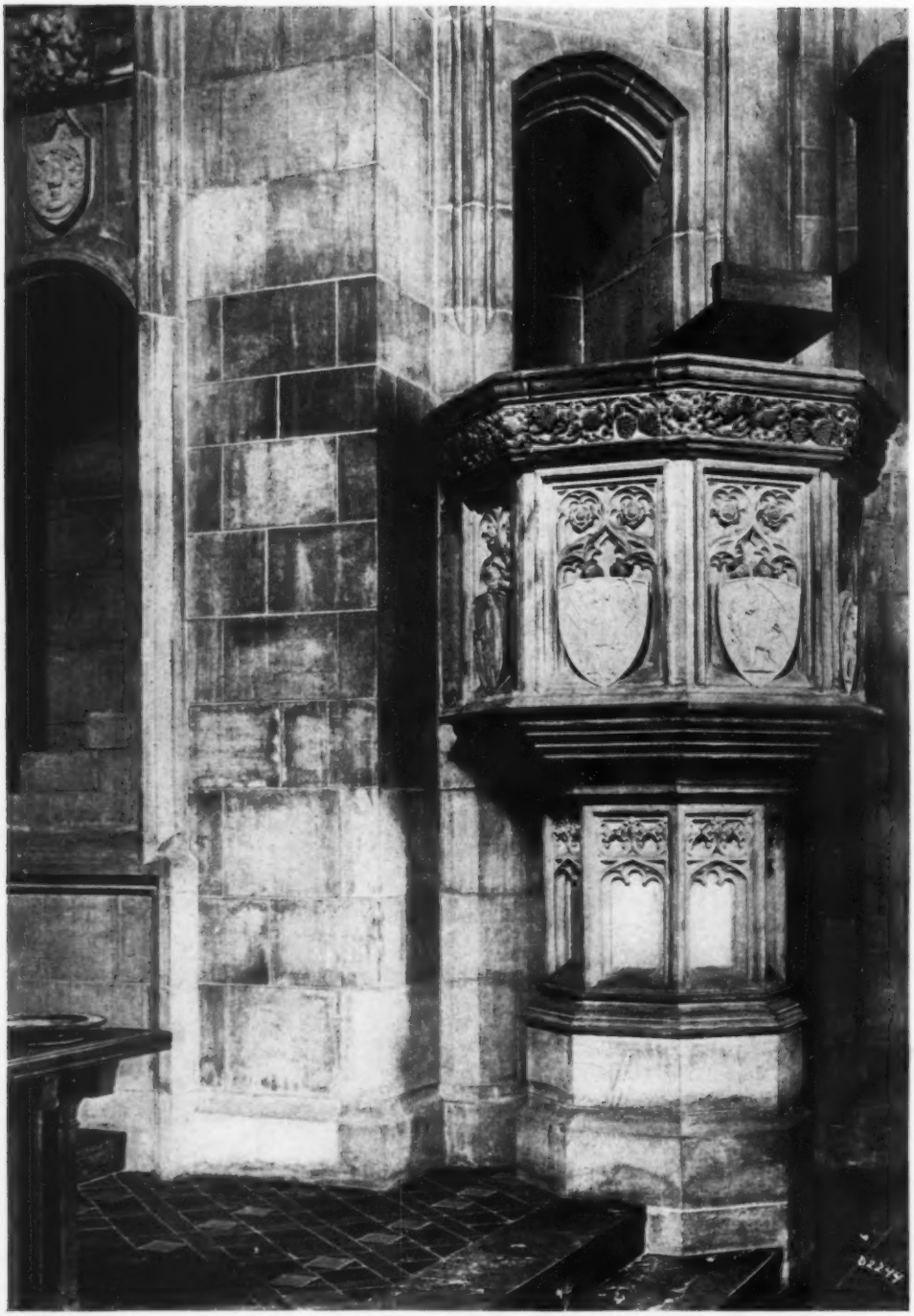
As one approaches the west or entrance end of the church, the beautiful facade gives promise of artistic satisfaction which more intimate inspection fully carries out. The receding buttresses, each capped with a fleche-like capital as course after course sinks back into the harmonious whole of the facade give an impression of delicacy coupled with strength.

The vestibule is particularly chaste and dignified. Three niches are provided on either side and the sacred number is completed by a niche in the door post which separates the two double-door openings at the entrance. Upon the lintel is charged the legend, quoted by one of the sisters of Bethany to the other "The Master is here and calleth for thee." In the conventionalized Gothic pediment above the lintel is a group particularly striking in its mystic significance. In the center is a figure representing the super-sacerdotal office and the two hands raised in blessing reach to the apex of the triangle. On either side are standing, bowing and kneeling figures, all in attitudes of supplication and adoration.

The approach to the church is by a narthex, which is slightly wider than the

DETAIL—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.

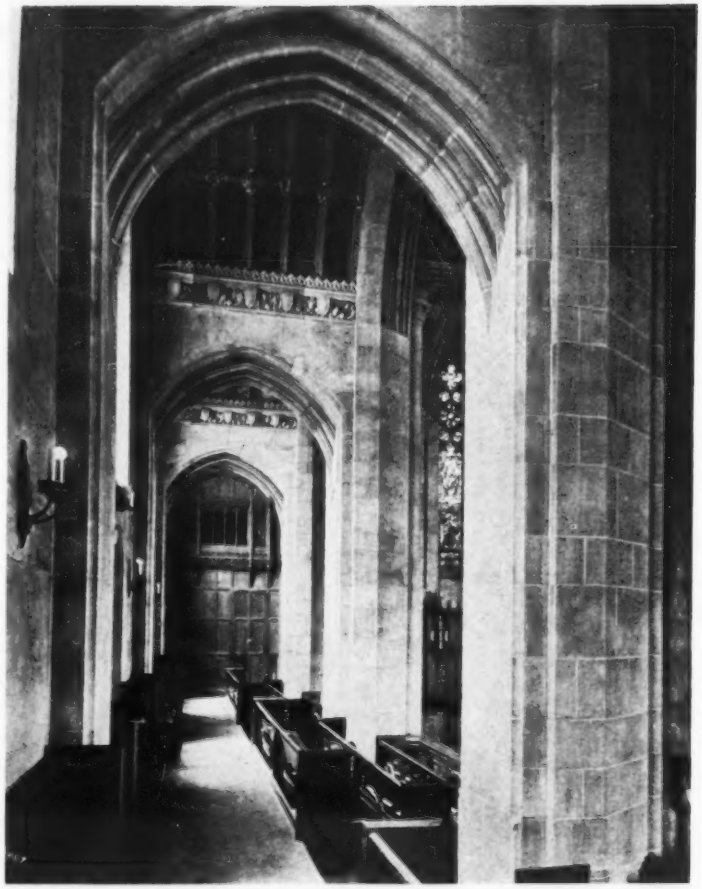
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.



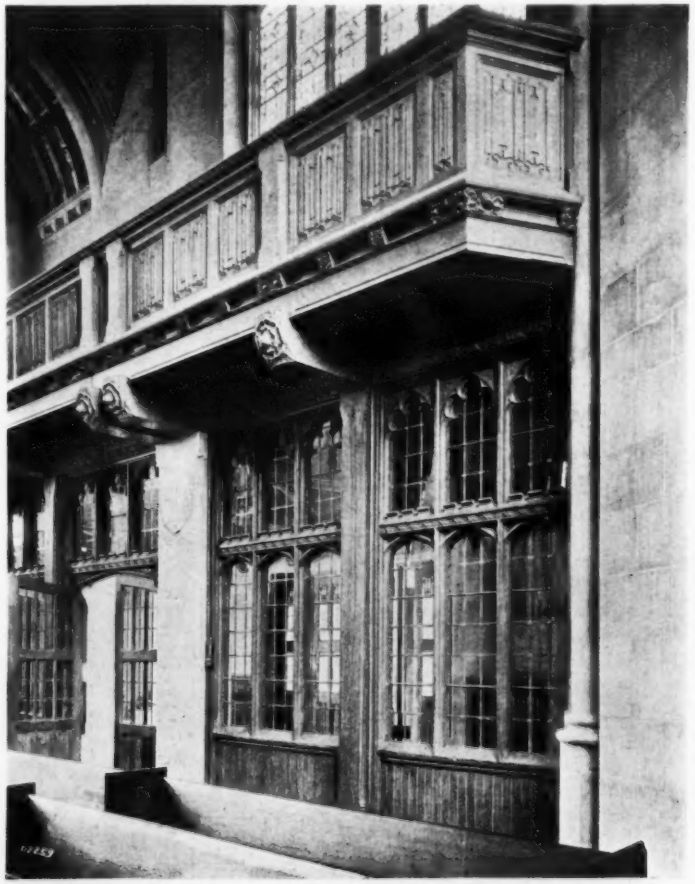
PULPIT—FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.

VIEW OF NORTH SIDE—FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.

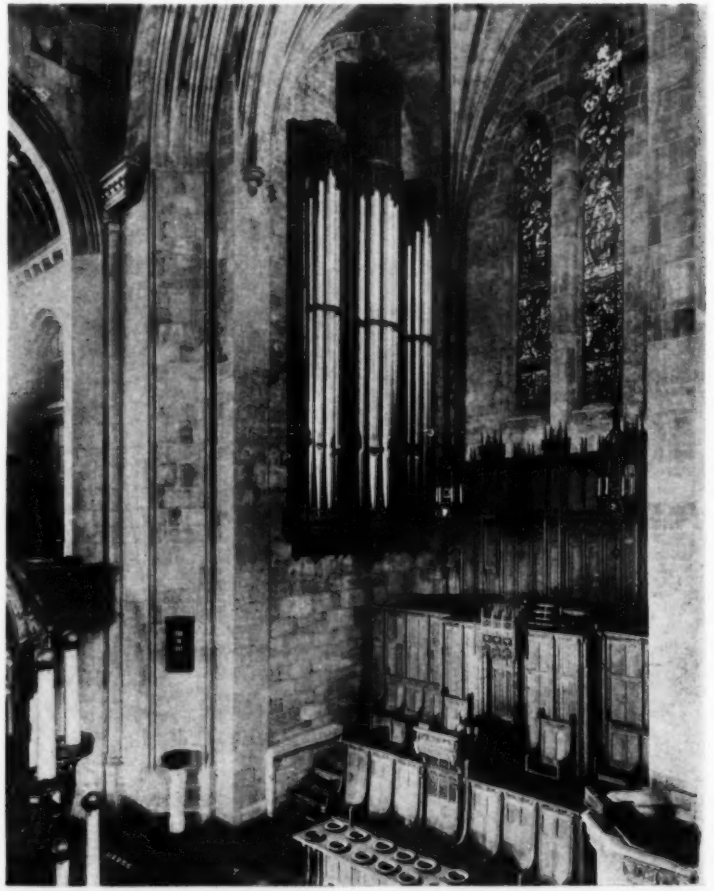
ARRANGEMENT OF GALLERIES—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.



SOUTH GALLERY—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.



SCREEN BETWEEN CHURCH AND NARTHEX—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.



CHANCEL DETAIL—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

DETAIL OF CHANCEL—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

lateral dimension of the nave proper and which is separated from the church by a beautifully executed wood screen, pierced for glass lights. Above the narthex is the west gallery from which the best ensemble view of the interior is accorded.

Standing in the center and by the gallery parapet, the eye of the experienced beholder is first struck by the richness of the color. Instead of the monotone or even monochrome ceiling, there is on the contrary such a wealth of bloom that one instinctively feels a similar sensation as when suddenly let into a beautiful garden, where nature is presenting her loveliest to God. If "the heavens declare the glory of God," equally does the loveliness of this ceiling bespeak His fairness.

Caps of the twelve massive and severely plain masonry pillars which support the roof and divide nave from extremely narrow aisles are each surmounted by carved figures, representing the celestial choir, and who stand in front of the basis of the six roof arches. Elaborately carved and colored medallions are placed in each of the arches—the medallions in pairs and bearing, taken together, two angels and the sacred letters "Alpha" and "Omega." Upon the arches themselves and upon the angels at the pillar caps, as well as upon ceiling and rafter, Mr. Frederick Bartlett of Chicago, a local artist of reputation and distinction, has evolved a decoration that is equal to the best of the mediaeval Gothic era. The reds, yellows and greens so extensively used are pure and rich, making the whole roof a mass of delightful low-toned color. This richness is in keeping and harmonious with the color scheme of the whole interior, including woodwork, stone, glass, and walls.

Coming out from the transept entrance one is led into the spacious en-

closure or garth. Around three sides of this, church and buildings stand. The street side is bounded with a low, but stately, cloister connecting the narthex with the manse, which stands on the other end of the lot.

Before noting the calmness and beauty of this garth, with its greensward interupted with granolithic walks and with a lovely fountain in the center, one will miss much by not turning and studying the exit from church to garth. A narrow niche divides the window on the second floor which runs from church gallery to a gallery on the same level in the Sunday school building, and this niche is surmounted with a tiara-crowned baldachino carved delicately and with light tracery in the stone. A blazon is charged on a stone shield on either side of the base of this niche, while smaller niches of generally similar design, but sufficiently independent in character to give an idea of slow development, such as old world churches show, stand at the point of juncture of the arch at the doorway, and the exterior walls.

Bisecting the garth diagonally, and passing a beautifully carved stone fountain—the gift of Mr. Howard Shaw, one of the architects who is also a member of the society which built the church, one comes to another entrance which is equally pleasing. This leads directly into the manse, the arrangement of which on the ground floor is admirable. A passage runs along the rear wall of the manse, from which stairways, up and down, lead off, and connects the garth entrance with the street entrance.

From the end nearest the garth entrance one enters the library. This room is about 20 by 25 feet with a deep bay window, and is similar to the dining room at the other end of the hall, even to the wide, deep fireplaces. Between these is a spacious reception hall.

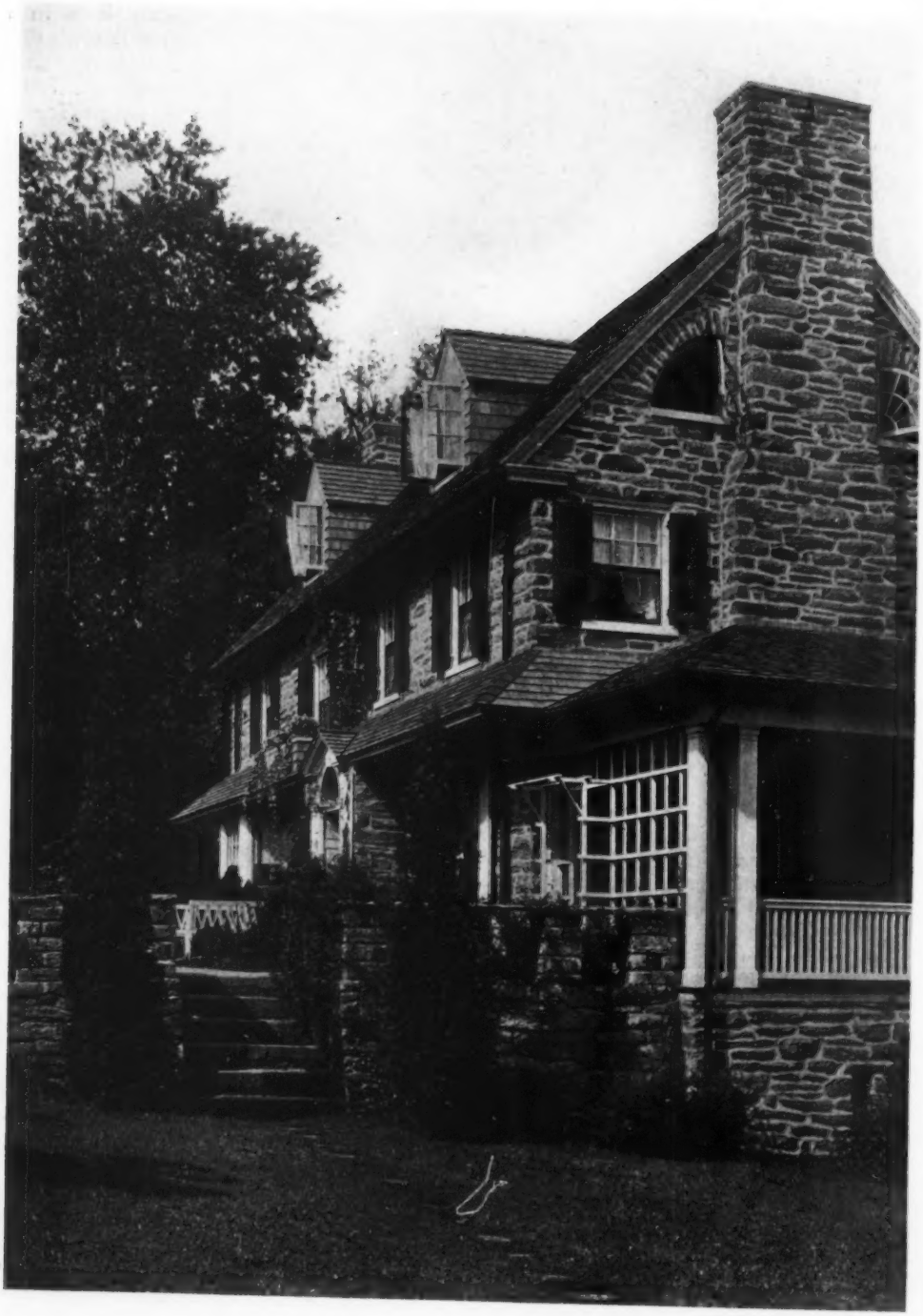
The street entrance is from the side of the manse. It is placed so that the street door is directly against the rear wall, while three arches and a stone half-screen shut off the sidewalk from the recessed entrance. A bent metal gate half fills one arch, and this opens into two thirds of the recess, and leads to a stone flight of steps up to the door. The rear wall of the manse comes all the way down to the foundation, shutting off the other third of the recess which forms the vestibule into the administration building.

The ground floor of the latter building contains two very spacious ladies' parlors, with trustees' and board rooms and the pastor's public and private office on the street side. On the sidefacing the garth and separated from the other rooms by a narrow passageway are the guild rooms. The men's and women's clubs, and the young people's societies each have their separate headquarters on the upper floors of this building. The men's club has a separate entrance from Chestnut street, farther from the corner.

In the arrangement of this public building Mr. Shaw has shown particular aptitude. With the exception of the space occupied by the chancel end of the church, the whole hypothenuse is taken up with the Sunday school building. As the whole building squares with the others, as it faces the garth, and as all the space up to the lot line is utilized, the architect placed the rooms in the order of their relative size in a logical approach to the truncated end of the triangular plan thus necessitated.

The primary departments are therefore placed on the Chestnut street end, allowing the junior department, which requires more space, to have a larger floor plan and leaving the largest area for the prayer meeting and Sunday school room. This is practically an assembly hall with galleries. The roof is open beamed and has a big skylight in the center. The galleries are supported by a series of square posts, between which heavy portieres slide, shutting off spaces for individual class rooms or permitting the whole area to be used for a single assembly.

Such is the new Fourth Presbyterian Church of Chicago, a combination of the new and the old—of the best of architecture in times Christian, an achievement in that it is American, Evangelical, an exemplification of the religious genius which will be followed in its use



HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECTS..

A VIEW OF THE APPROACH—HOUSE AT CHESTNUT HILL, PHILADELPHIA.
Charles Willing, of Furness, Evans & Co., Architect.

TWO GOOD MODERATE-COST HOUSES

Chestnut Hill, Philadelphia, CHARLES WILLING *of* FURNESS, EVANS & Co., *Architect.*
Ardmore, Penn., EVANS & WARNER, *Architects.* By HAROLD D. EBERLEIN

PEOPLE and the houses they live in are comparable in more ways than one. It is the people of average comfortable means, of average intellect and education, of average endowments generally, who create the prevailing tone of the environment in which we live. It is the houses of average size that determine the architectural character of a community or of a country. Palatial establishments, created at a vast outlay of money, are often highly interesting for their style and manner of execution or for the excellence of their gardens, but cannot be said to afford a thoroughly representative exhibition of national domestic building.

Because the majority of houses must of necessity be of moderate size and moderate cost there is no inherent reason, however, why the individual house should be at all lacking in distinction. At one period, indeed, easily within recollection, the average house did lack distinction, but considering the type of domestic architecture then prevalent, it is well that the common jejune and banal mode was not ordinarily accentuated by particular instances of quintessential mediocrity.

Fortunately that day is past. Anyone who has closely watched the architectural trend for the past fifteen or twenty years cannot have failed to be impressed with the steadily increasing betterment taking place. We have by no means reached a stage of perfection, but we have attained a point whence we may look back at the uphill course of improvement with reasonable satisfaction

and some degree of pardonable pride. One of the surest indications of healthy development is presented in houses of unpretending dimensions. While many, of course, still rank in the "decently inoffensive" class, not a few have assumed a strong individuality and well-poised bearing, free from eccentricity or mannerism and happily fused in an air of quiet distinction—a result inevitable with a quickened architectural conscience and sharpened perception among laymen and the present realization by architects that such dwellings afford opportunities well worthy of their mettle.

Of this ilk are both the houses in the following discussion, conceived in different vein and therefore the more broadly indicative of the promising condition alluded to. The first is at Chestnut Hill, Philadelphia, and was designed by Charles Willing, of the firm of Furness, Evans & Co., and the second, at Ardmore, within the bounds of the old Welsh barony, just outside of Philadelphia, is by Evans and Warner, of the same city.

Honest structures, built of honest materials native to the neighborhood and displaying traditional local features for which there is historic precedent and background, always command more respect and interest, a more normal interest at least, than exotic creations shaped in an alien style and fashioned out of stuffs fetched from afar. Whatever their shortcomings, the former possess the sterling merits of congruity and individuality, while the latter can never quite escape from the taint of affectation and pretense.

By way of example, we are all ready to admit that one of the chiefest charms about English cottages is the fact that they are a simple, straightforward expression of local conditions, both as regards pattern and the materials; local feeling and native materials have indelibly stamped the fabric. We instinctively recognize the fitness of all this and yield respect and admiration.

On our own side of the Atlantic, also, we expect to find architecture, especially domestic architecture, tinctured by a vernacular expression; and we wish to have it so. In New England we look for certain distinctive characteristics of line and detail, in New York we look for others, while in the Middle and Southern States we are sure to find others still, all in their own proper territory for which they are best fitted and where their evolution has been determined by local traditions and expediency.

We should be surprised and perhaps a trifle shocked or annoyed to come suddenly upon a dwelling of an unmistakably local stamp set amid surroundings with which its whole spirit was obviously out of keeping. The local fitness of architecture does impress us strongly whether we are fully conscious of the impression at the time or not.

In the house at Chestnut Hill, by Mr. Willing, of Furness, Evans & Co. of Philadelphia, this local fitness has been regarded and local traditions have been adhered to in structure and fabric. Grey Chestnut Hill stone has been used and the architectural mode chosen is Pennsylvania Colonial. The term Colonial is used advisedly and not in the mistaken application used to denote the Georgian style. The house is the legitimate child of the Pennsylvania Colonial style and has nothing Georgian about it save the treatment of the doorway.

For the satisfactory texture of its masonry this particular part of Pennsylvania has always been noted and the subject under consideration affords an admirable example. The rubble walls are of quarry faced stone and have an especially good color, thanks to the diversities in the stone. When this Chestnut Hill stone is taken from deep down in the quarries it presents a cold, monotonous grey, but where the upper strata have been somewhat subjected to the action of the elements through faults and seams, delightful variations of warm color appear. In the present instance stones from the upper strata have been chosen and the chromatic result is particularly satisfactory. Together with the varied hues of the stone the shadows of the rough surface produce an agreeable softness.

The sharp pitch of the roof follows an early precedent, as do also the extreme-

SOUTHEAST FRONT OF HOUSE AT CHESTNUT HILL, PHILADELPHIA.
Charles Willing, of Furness, Evans & Co., Architect.

ly simple barge and eaves cornices. Departures from the early Colonial prototype are noticeable only in the doorway, the bow window on the first floor, the casements in the dormers and the porch at one end. All these departures, however, have been so managed that there is no suggestion of incongruity to disturb the rigid purist. Rather are they indications of wholesome growth and elasticity. After all is said and done, slavish copies may be punctiliously accurate and highly interesting from an antiquarian point of view, but they can scarcely be expected to possess much vitality. Any architectural style that has outlived its elasticity and is no longer susceptible of acceptable adaptation to the needs of present generations does not commend itself to favorable consideration.

The Chestnut Hill house and many others of similar type emphasize the inherent vigor of the Pennsylvania Colonial style and the readiness with which it lends itself to the most varied of modern requirements. The peculiarity of the site on a steep hillside made it desirable to stress the horizontal lines. This was successfully done by the introduction of a penthouse between the first and second floors. The use of the penthouse is simply a return to an early Pennsylvania practice. It also brings down the height of the structure and helps to tie all the structural lines more intimately to their setting. The complete simplicity of the whole house and the avoidance of all effort at effect endue it with a presence both dignified and convincing.

On surveying the house as a whole one might perhaps take exception to the dormers, not on the ground of architectural precedent, but on the score of symmetry. Expediency, of course, often demands them, but they are always dangerous to the repose of a small roof. A large roof can stand them with less disastrous results, but the balance of a

small roof is seriously jeopardized by their presence. A comparison with houses of like style where the dormers have been omitted will convince the reader of the justice of this observation in favor of unbroken roofs. It should be conceded, however, that the two dormers in question have been treated as unobtrusively as possible and do not present a very serious ground of cavil.

The problem of the suburban house of moderate size is not always one of easy solution, particularly if there is any tendency to indulge in ambitious flights of fancy. Here no fights have been attempted. From ground to ridge pole, sober common sense and restraint are the dominating characteristics, and though this mode of architectural expression may not appeal to some, all will agree that the quiet refinement and dignity of the structure are bound to wear well and command universal respect.

Oak Lodge, at Ardmore, designed by Evans and Warner, is fitly so named from a veteran oak tree that stands not twenty paces away from the north front of the house and casts its shade over the roof. The pleasantest outlook is towards the north and the house faces in that direction.

Glancing hastily at the contour of the structure, without stopping to take in the details, the mass seems to be a rectangular truncated cone. On closer inspection its closest architectural affinity is quite patently with the small English country house of modern date, a general type that has much to commend it—of course, with necessary local adaptations—to the favorable consideration of many suburban dwellers. The dwelling of this stamp has reached a fuller and more mature development on British soil than among us, and it is the realization of this fact that has caused so many of our American architects to study with deep interest and often with profit, the performances in this direction on the other side of the Atlantic. It is not that our own architects lack either ability or invention, but it is natural for them to regard attentively the growth of a domestic type overseas that did not, for many years, receive in America the full share of attention that its importance merits and was consequently in a backward condition until a recent date. The marked progress achieved in this field by American architects within a brief period is full of encouragement, and justifies the expectation of rich and creditable results in the near future.

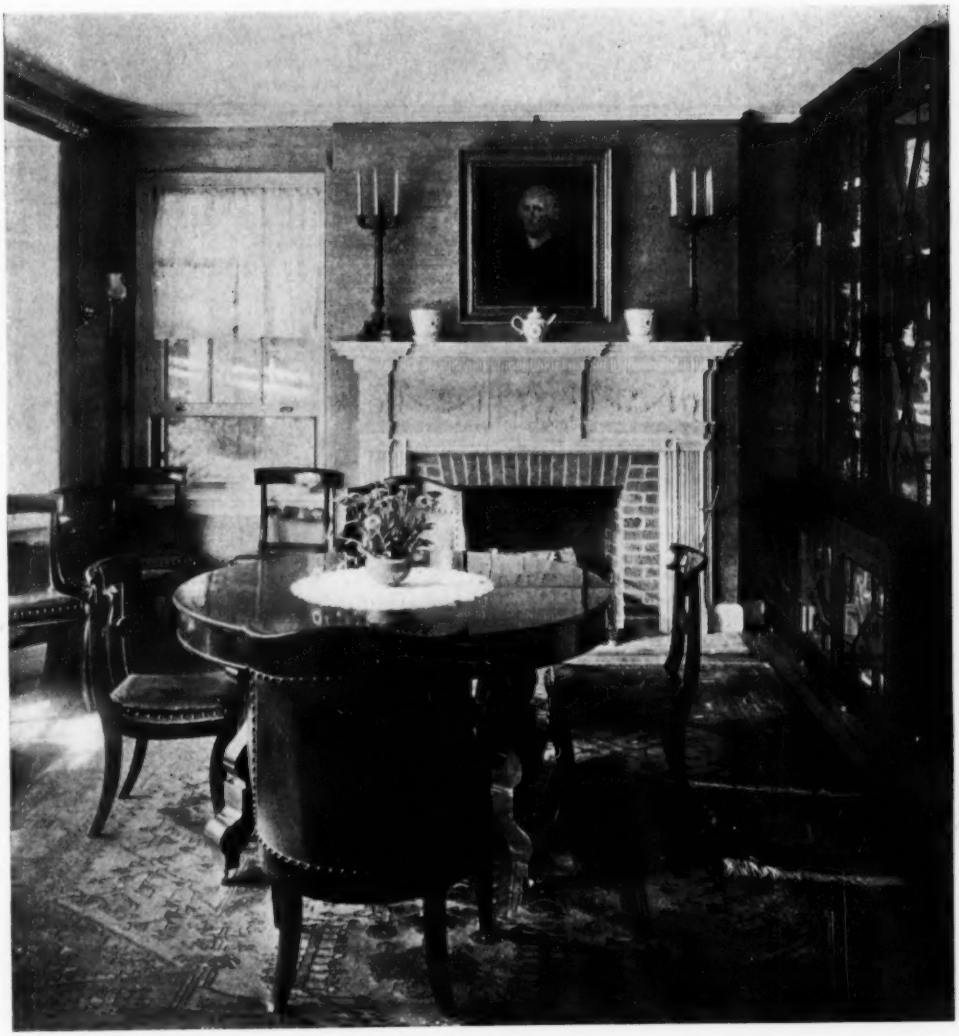
The objection may, perhaps, be raised that it is a mistake to transplant and adapt types so obviously without native antecedents when we have so many fully developed forms supported by the long standing sanction of local precedent and tradition. The answer must be that in the rapid growth of so many vast suburban areas a strict universal adherence to forms of architectural similarity would inevitably result in wearisome monotony, and any sane and reasonable method of effecting differentiation between the units of a suburban community, within the limits of permissible variety, is to be viewed with favor rather than suspicion.

Oak Lodge is full of singular individuality that predisposes a visitor to examine structure and setting closely and try to determine wherein lies the charm. Wholesome simplicity of aspect, combined with eminently practical provisions for compact comforts that make it an exceedingly "livable" dwelling, are two striking factors of its success. A peculiarity in the lines of the roof cannot fail to interest the observer, even though its purpose may not be altogether apparent. There is a curious double slant, the roof over each projection pitching at a sharper angle towards the ground than the roof over the body of the house. The effect is somewhat like the droop in the unpadded shoulders of an English cut coat, and one is inclined to suspect that the architect adopted this device partly to prevent the seeming spread of the house from being too great for its actual area. At any rate, the result is not inconsistent with any structural feature and is amusing and agreeable, and therefore worth while for that reason, if for no other.

The northeast projection contains part of the service equipment, which will be discussed along with the rest of the in-

HEDGEROW ALONG BELL'S MILL ROAD—HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECT.

LIVING ROOM—HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECT.



THE DINING ROOM—HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECT.

terior. The northwest projection, containing the brick paved porch in its lower portion, exemplifies a commendable arrangement of incorporating that member within the structural lines of the mass and thus avoiding the disagreeable "tacked-on" appearance so many porches have, as though they were mere afterthoughts and had no real *raison d'être* other than the fanciful whim of a moment.

The line of the roof is not seriously interrupted by the round hooded dormers and presents an almost unbroken slope from the ridge pole down to the eaves. While on the subject of undisturbed and reposeful roof contours, it is worth noting that a sleeping porch has been ingeniously worked in at the southeast corner of the back, without seriously disarranging the outlines of the general mass and making its presence painfully obvious and distracting. It is always interesting to see how unobtrusively this *bête noir* of the architect can be managed and how nearly suppressed as an architectural feature. There could be no valid objection to recognizing it frankly as a necessary structural feature, if it regularly fulfilled the function for which it is designed, but in a great number of cases, after the client has satisfied the dictates of his obsession to have one, he goes right on sleeping indoors.

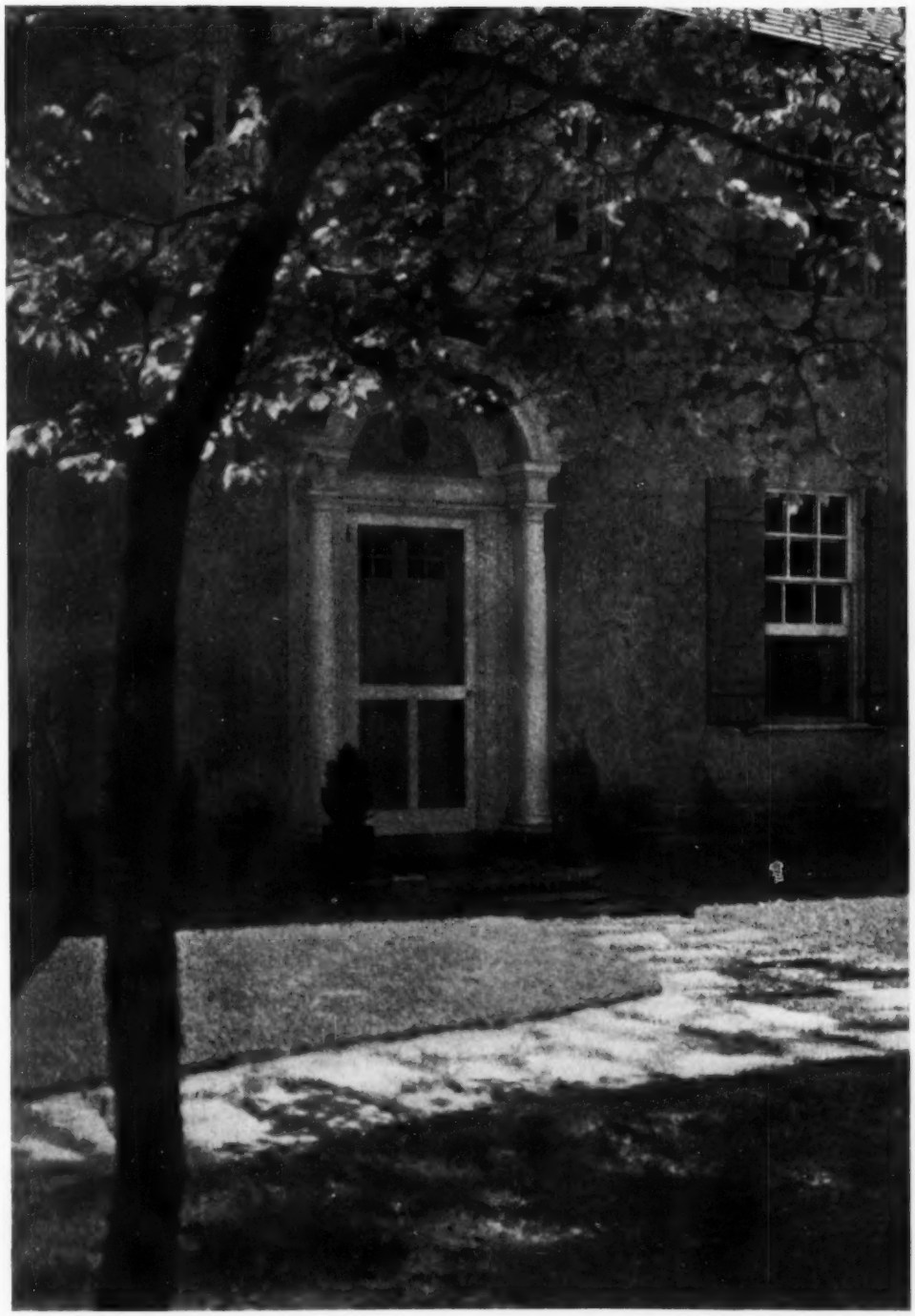
Whether or not the present popular predilection for sleeping on porches is a passing fad remains to be seen, and the designing of sleeping porches with a view to their possible future incorporation within the house walls has something to be said in its defense.

The walls are rough-cast in plaster of a light brownish grey, with the float marks left plainly visible so that an interesting texture has been secured. An agreeable note of color is added in the shutters, which are painted in light green, the hue of young, glaucous oak leaves. The house door, set between white pillars and beneath a shallow arched hood, is of a light green blue, while in the plaster, just beneath the arch of the hood, is set a large oval greenish tile bearing the device of a tree, the picturesque badge of one of the early Pennsylvania fire insurance companies. The color of the door and shutters, the white pillars and hood and the inset tile are all small things, it is true, but just such little things often serve to centre interest and enhance the character of a small building.

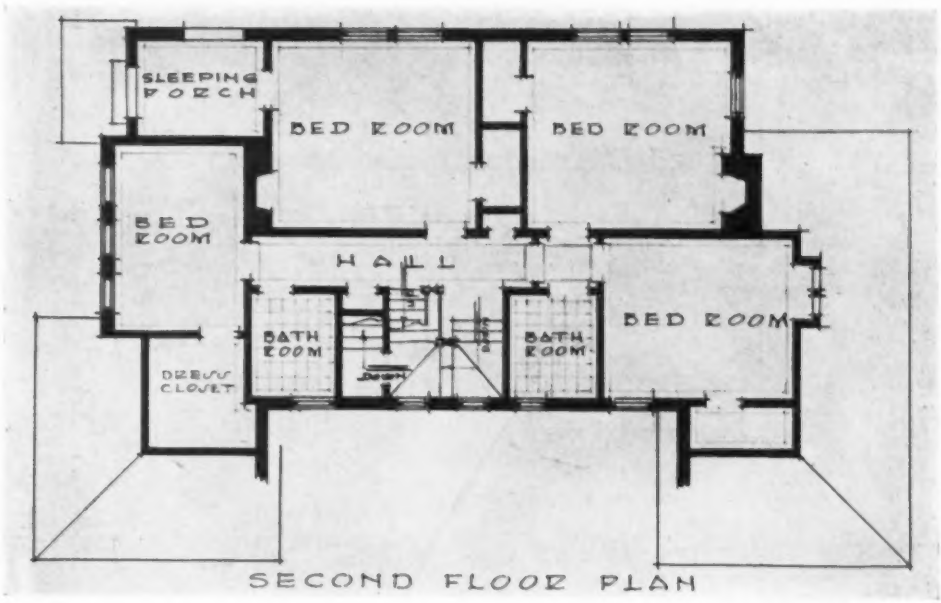
Unless an architect is willing to have his liberty of choice restricted in matters of design, and willing, likewise, to be fettered and circumscribed by trade standards of size and pattern, he knows only too well the difficulties he is likely to encounter when he tries to get doors and shutters for the doorways and windows he has planned. Any departure from stereotyped commercial conventions means that stock sizes and patterns will not answer; and if special orders for millwork have to be executed, there is usually a vexatious delay. In the case of Oak Lodge, the Gordian knot was quickly cut by making plain batten shutters out of V grooved pine boards, the battens on the inside. For a small house of studied simplicity, where the choice of material must be carefully considered in connection with cost, batten shutters and doors that can be made on the spot by any competent carpenter offer a welcome solution to an oftentimes vexing problem.

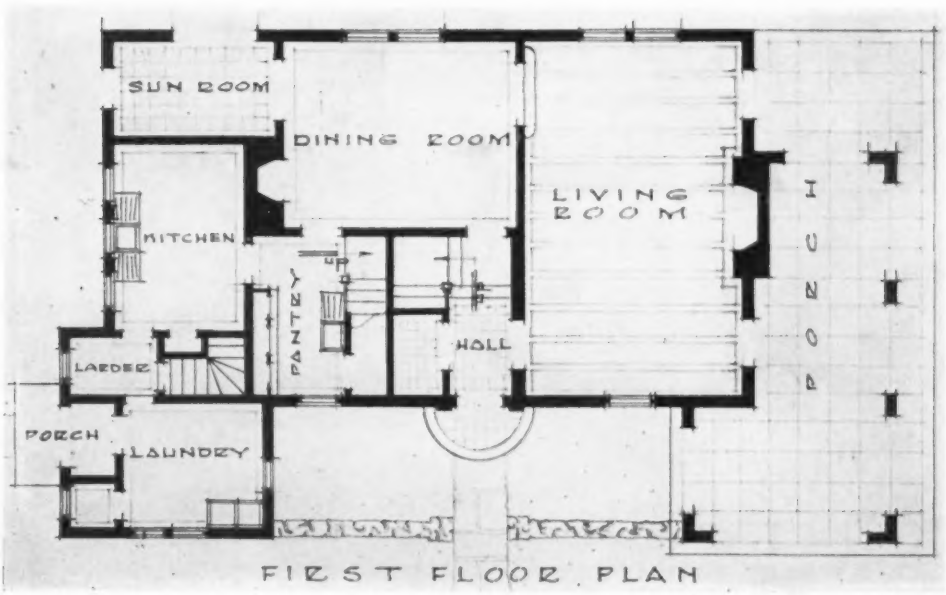
Oak Lodge sits down on the ground and there is no inhospitable ascent of steps at the house door. To preserve this agreeable intimacy of contact with the soil, the cellar has been kept below ground; and the windows, with their tops not quite up to ground level, are enclosed in grate-covered wells sufficient to admit abundance of light and air. The chief factor, however, in keeping the close relation between structure and site was the device of making the first floor rooms on different levels to coincide with and follow the slightly sloping contour of the ground.

The practice of diversifying floor levels embodies a principle of which we might profitably take more account. Until very recent years an unreasoning prejudice against it seems to have existed in the lay mind and opposition has by no means yet disappeared. Of course, no one expects floor levels to be varied



HOUSE DOOR AT OAK LODGE, ARDMORE, PENN. EVANS & WARNER, ARCHITECTS.





INTERIOR OF OAK LODGE, ARDMORE, PENN. EVANS & WARNER, ARCHITECTS.

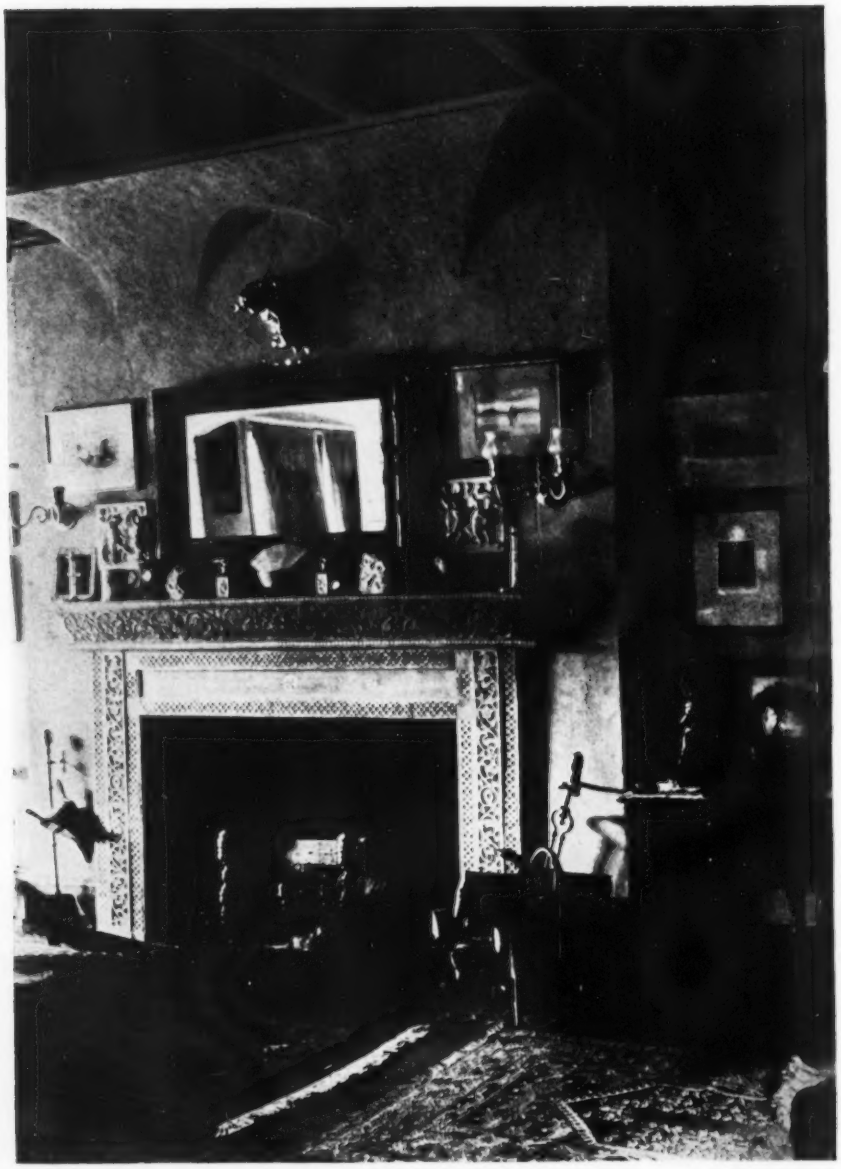
NORTH FRONT OF OAK LODGE, ARDMORE, PENN.
Evans & Warner, Architects.

out of mere caprice; but where any reason exists for so doing, arising from either interior or exterior conditions, there ought to be no hesitation about making the break. One good and sufficient reason, as in the present case, exists where the site slopes. Under such circumstances, unless floor levels are varied in different rooms, either a great deal of expensive grading must be done or else a portion of the foundations will inevitably be visible, awkward and raw looking as one all too frequently sees them. It is surely better and more reasonable, where the style of architecture permits, to let site and structure grow together without disturbing natural conditions.

The interior plan is commendable for its rigid economy of space from bottom to top. There is no waste room, despite the fact of the long sloping roofs in which, apparently, so much of the house is contained and which in similar structural conditions one ordinarily associates with prodigality of space. The interior plan is also commendable for simplicity of arrangement, along with completeness in all essential appointments. Only what is necessary is included and all else has been dispensed with. A large living room, a dining room with a tiled porch that is a potential conservatory if it is ever deemed desirable to enclose it in glass, a pantry, a kitchen and a laundry provide all requisite comfort of arrangement for a small family. The servants' stairs go up from the pantry.

The second floor has four bedrooms, two baths and abundance of closet space while the third floor contains two maids' rooms, a store room, a bath and a deal of storage accommodations in places rendered impracticable for other uses by the slope of the roof. A hanging stairway from the second to the third floor is swung out in the hall wall in a rather interesting manner.

A special word is due the fireplaces. The living room, otherwise exceedingly simple in finish, is enriched with a fireplace of which the surrounds and mantel are executed in cast concrete in an

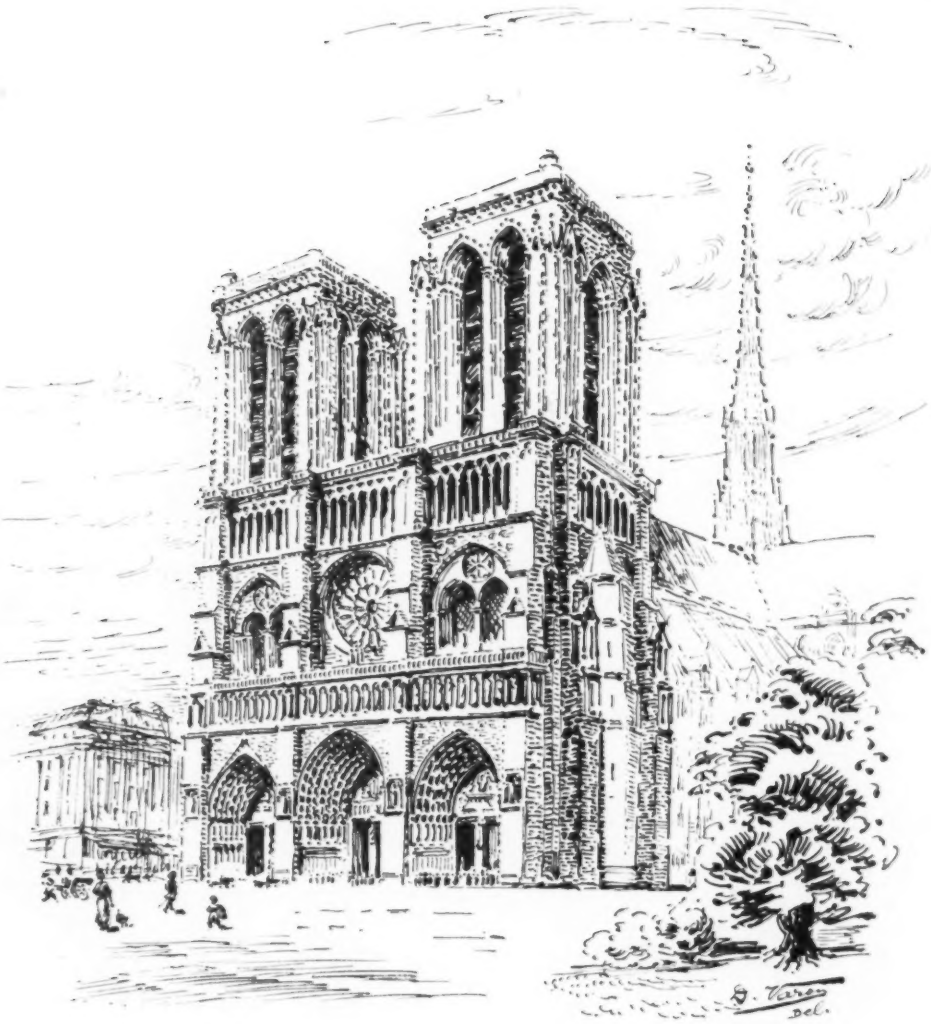


CONCRETE MANTEL IN LIVING ROOM—OAK LODGE, ARDMORE, PENN. EVANS & WARNER, ARCHITECTS.

REAR OF OAK LODGE, ARDMORE, PENN.
Evans & Warner, Architects.

elaborate Byzantine pattern and the upper part of the chimney jamb is coved. The effect is excellent and attention is naturally centred on what is properly the focal point in a room of the sort. The fireplace and overmantel in the dining room, though interestingly wrought in faience tiles of varied design, is not so fortunate, owing to its bad location in a corner by the pantry door. All the bedrooms in the second floor have fireplaces and the white, pale blue or pale green matt-glazed tiles of quaint pattern add not a little to the distinctive character of each. The inclusion of a fireplace in every bedroom has much to be said in its favor, from a sanitary point of view as well as from considerations of comfort. The bedroom fireplace is associated with leisurely evenings and with mellow, bookish recreations conducive to wholesome slumber.

Where so much had to be included in a limited compass something had to be sacrificed, and this made it necessary to crowd the stairs into the least space compatible with comfort and utility. The arrangement is ingenious, and the greatest breadth of atmosphere possible has been gained by open partitions; but architecturally, one feels that a little more freedom and sweep would have been a desideratum. Barring this defect and one or two trifling matters that the hypercritical might be disposed to cavil at as "stunty," the sterling merits of conception and achievement embodied in Oak Lodge entitle it to distinctly favorable regard among the houses of its type.



NÔTRE DAME, PARIS.
THE WEST FRONT.

EXPRESSION IN ARCHITECTURE. *Text & Drawings*

By DAVID VARON

THE conception of the oneness of the universe is nowhere better illustrated than in the oneness of art. Arts certainly differ greatly from one another; but in the main the same rules govern them all. While this is true only in a general way with regard to the analogy between poetry and sculpture, for instance, because it requires some effort of the mind to grasp it at once, it is not so with the analogy between architecture and its sister art, sculpture. The main phases of the evolution of sculpture we may trace also in architecture.

Sculpture in its origin was hieratic, symbolic. It was subjected to certain inviolable rules. The gods had their attributes, their consecrated forms. Never was any passion shown in their faces, though in mythology they had more than one serious disagreement with one another, and many a time with mortals. But—splendid models for our modern diplomats—they must not show any sign of anger, or of any other passion.

In the age of Pericles the emancipation of sculpture began; and not long afterwards the immortal Praxiteles and Scopas broke down hieratic principles, at least when representing profane subjects, and distinguished themselves by the strong expression of their works. Joy, sorrow, suffering and other passions found their way into the marbles of those masters.

As with sculpture, which lived for a long while under the strict rules of priesthood—some dictated by religious rites, others by tradition or by symbols—so was it with architecture. Most authors agree that it was the power of tradition that dictated to the architects of the Parthenon many of the ornaments that were only survivals of elements of construction in the wooden shrines. With the growth of rationalism, however, in the different branches of human knowledge, reason became a prevailing factor in architecture. This, far from removing beauty, on the contrary, considered aesthetics as an important need in human life. It was rationalism that ushered character into architecture.

That the public is looking now for expressive architecture, there is no doubt: many factors tend toward a more intelligent conception. The stage, for example, is doing much to train the public. Architectural scenery is designed not only in accordance with archaeology, but also in harmony with the character of the play. The masses are awakening to a fuller sense of the beautiful. People are no longer content with a profusion of columns and ornaments indiscriminately distributed. They care no longer for a fire-house built like a part of a French chateau or of an Italian villa. Above all, a fire-house must wear the look of what it really is.

The public is aware that the architects of the so-called Gothic period had no Renaissance examples to follow, yet they achieved great works, works of character, because truth was the basis of all their achievements. Every one is delighted when looking upon any ruined chateau under the light of history. They are thrilled. Every element of the dungeon helps to bring this sensation; but it requires some explanation. This means training. And indeed, why should the training to appreciate expression in art require no time or pains, since it takes years for the child to learn to read upon his relatives' faces the expressions of their different feelings? This is a fact we always forget. We call learning that only which has been given to us consciously upon the benches of the school; but what has taken years of observation on the part of the child we disregard. This has been our mistake for years; but now we are beginning to realize,

thanks to the thorough studies of psychology, the importance of the unconscious training of the child.

The public argues that the artist should create things that anyone may grasp. But, then, every one should be trained, so to speak, from his childhood, to appreciate the expression of a work of art just as he learns to read.

We feel the need of training everywhere; fully to appreciate a sonata we must have been initiated to its beauties, both emotional and intellectual. What a joy when, to the delight we get from the purely beautiful sounds, we add the intellectual part, which allows us the loosening of our imaginations. The trained man is no less in rapture when he can fully enjoy the difference of expression between the different classes of buildings and architectural works in general. While this is true, on the other hand, the idea that each conception must have a definite expression of its own is yet very vague. Let us analyze the way in which the attempt is made to instill character into architectural work.

Here, for example, is a Masonic temple. The traditions of this secret society, freemasonry and its rites, surround it in the mind of every one with the idea of mystery. How do they try to express it? They simply differentiate it as much as they can from other buildings. They say, "A house has a porch; therefore to differentiate our building, we will have no porch in it. Further, a house has windows on the front; our building shall not have such windows." This is all very well; but in not doing this or that we have simply negative characteristics. In this way we may only emphasize the absence of those elements which would make our building look a perfect house. But where are the positive characteristics, those which belong to the Masonic temple and to no other architectural work, those features which have their origin in a need and which tradition handed down to us? Here is the problem. This is precisely the point where we may draw a line between an architect and a contractor. For, if it were enough to scatter indiscriminately orders and architectural ornaments, what easier than to take a Vignola or some other hand book, and content ourselves with making our structure as different as possible from some other class of building?

We may safely say that we are passing this stage. Mere Vignolas and other sorts of formulae are no longer sufficient to make of any structure a real work of art. What, then, is to be done? Here is the point where we may derive valuable teaching from sculpture.

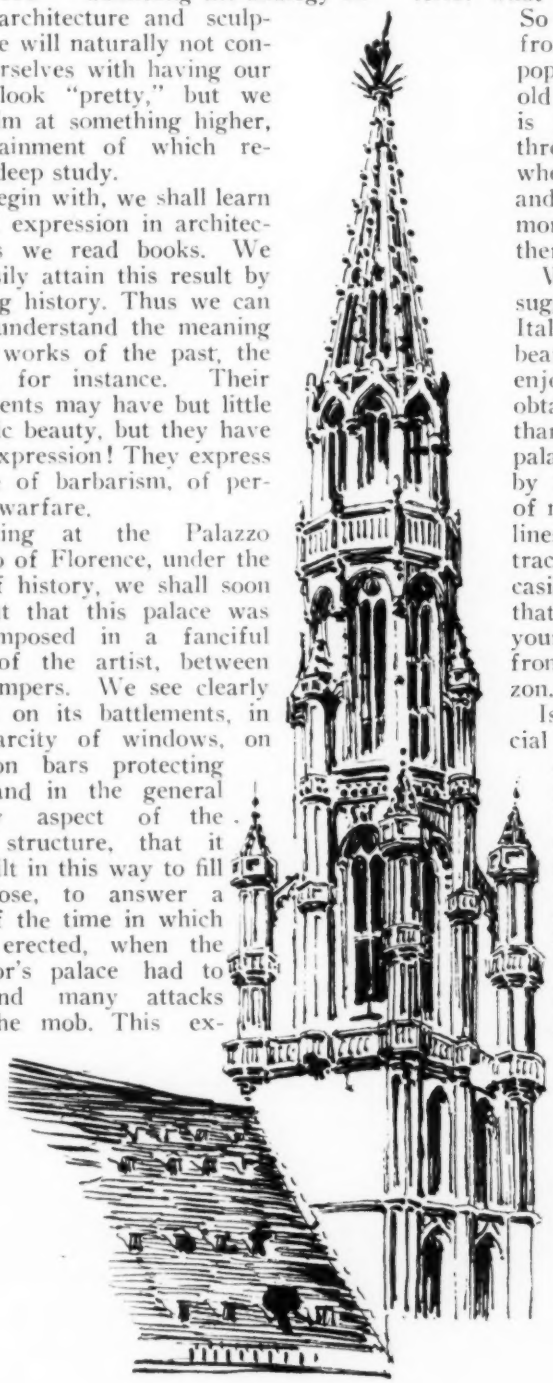
Suppose a sculptor intends to represent happiness. His work is completed and you are invited to visit the exhibition. Whatever the efforts of the artist were, you will not say that his work is a success unless it carries to your mind the sensation of happiness. Let us assume, for the glory of the artist and for your delight, that it does enrapture you. Now, passing to another part of the same exhibition where the same artist has striven to represent sorrow, you will see very well, if the work is successful, that to achieve this the artist could not content himself with taking the piece of statuary representing joy and suppressing in it that which was the characteristic of joy; but he strove to find out the very essentials of sorrow. If joy is expressed by the image of a dance, sorrow may well be expressed by something like that of a mourner. The latter not only will not show signs of gayety expressed by special lines; but on the contrary, the expression of the face will be somewhat downcast, the head drooping and the aspect dejected. The difference between the two casts does not lie merely in the absence of certain details, but in the presence of the very silhouette. It is this outline that from a distance, when details cannot be detected, tells us of the sentiment animating this or that person; this or that cast. Details enhance our sensation as we come nearer; they complete it. The artist's work will impress us not only in proportion to his skill, but also in proportion to our own training and culture. The layman will be satisfied with being entranced; the cultured person will find interest in every detail that the artist has borrowed, either from tradition or from history, in order to make his work still more eloquent.

Admitting, then, that, as Viollet-Le-Duc puts it, in the mouth of one of his

characters, "the absence of evil does not make good—" admitting the analogy between architecture and sculpture, we will naturally not content ourselves with having our works look "pretty," but we shall aim at something higher, the attainment of which requires deep study.

To begin with, we shall learn to read expression in architecture as we read books. We can easily attain this result by studying history. Thus we can better understand the meaning of the works of the past, the castles, for instance. Their battlements may have but little aesthetic beauty, but they have much expression! They express a stage of barbarism, of perpetual warfare.

Looking at the Palazzo Vecchio of Florence, under the light of history, we shall soon find out that this palace was not composed in a fanciful mood of the artist, between two bumpers. We see clearly written on its battlements, in the scarcity of windows, on the iron bars protecting them, and in the general military aspect of the whole structure, that it was built in this way to fill a purpose, to answer a need of the time in which it was erected, when the governor's palace had to withstand many attacks from the mob. This exterior, so severe, was to the interior what the thorns are to the rose. So are many Italian palaces, frowning, as it were, on the populace. But cross the threshold and behold a change! It is the belligerent duke who throws off his coat-of-mail and whose garments display wealth and taste. The inside is in harmony with the man living there.



BELFRY OF TOWN HALL AT BRUSSELS.

While the Palazzo Vecchio suggests constant warfare, the Italian villas, on the contrary, bear all the signs of free and enjoyable life. Not only is this obtained by more windows than there are in the military palace, by elegant arches and by the absence of suggestions of militarism, but the general lines themselves are more attractive, and the silhouette of a casino is as far removed from that of the castle as that of a young and elegant duchess is from that of a fighting amazon.

Is there need for a special formula? Is there any clearer and more efficient teaching than that given us by these structures? Can we not be our own teachers simply by developing our own observing power? Moreover, you no sooner subject art to formulae than you fetter it. No teaching can give talent, but teaching

may develop it. One remembers the story of the artist and the layman. The latter in a mood of enthusiasm about painting, asked the master what was necessary to make a good picture. The master answered: "Not much. First you take a canvas, then a certain number of colors, and you mix them with very much talent. That is all."

The book of nature is open to all. Each one may learn to read it. The more he thinks about what he sees, the more will he reach to the roots of things, and thence derive inspiration, thanks to the principle of the oneness of creation and of art.

Assuming now that we are familiar with expressive architecture, how shall we apply these principles in the case of a hospital, for instance. At this point many will exclaim that beauty is useless in such a class of building, hygiene being the only essential need, the rest being immaterial in their eyes. Indeed, we do not necessarily mean to cover the walls with a profusion of ornaments, and we may well be satisfied that there should be no cornices nor pediments. But such details are not the essentials to be considered in architecture. There are far more important factors.

On this occasion it is not irrelevant to quote the late M. Guadet, who says in reference to this class of structures: "The middle ages hospital was a house where one could die with the help of religion." This last refuge to the dying man was given to the poor by charity. To-day we have other conceptions of our duties towards one another, and the hospital must be the place for healing; as such not only purely physical remedies are put to work, but also moral and mental remedies. Aesthetics is one of them. Beauty is an essential human need, and as such, it finds its place in a hospital as well as in a mansion. The question is how to give it the right measure. What most pleases the patients is not the frigid length of corridors in some public hospitals, but the impression of a homelike shelter. Superabundance of columns and ornaments does not contribute to healing as much as does the good log fire by its homelikeness. Flowers are the natural ornament that you can, without fear, scatter all about you, in as great abundance and with as much taste as possible. The Solarium here is one of the essential features that contribute toward giving the hospital its modern, attractive character.

To ask more precision than this is equivalent to asking one to learn a language without a master. Ask some of the masters who have dealt with the question of teaching languages, and they will tell you that the best thing, if you are desirous to learn the Italian language, is to have an Italian master whom you may hear speak Italian. I should say the same with regard to architecture. Let us go and see the buildings and all sorts of architectural works; and see them at all times and in all kinds of weather, and you will not fail to draw some conclusions. Let us study the hospitals of some centuries ago in relation to the prevailing ideas of those times; and compare them to the modern idea of the oneness of humanity.

Let us see then, what are the common points between a hospital, a public building, and a home. Of course, a hospital should not express sadness. It should indeed wear an attractive look, yet quiet. As the watchful nurse helps by her gentle smile, so must a tint of cheerfulness, gay lines and colors, warm up the whole structure. There cannot be a formula for the solution of the different problems; the standard of human thought is rising every day and this involves art, which is nothing but materialized thought.

Any one entering a gallery of sculpture will stop to admire the expression of the bust of St. Francis of Assisi. This admiration is not that of the child before a rose bush; but of the cultured and observing mind. The observer stops to wonder by what prodigy the sculptor could impart so much spirituality and life to the rigid and cold marble—how the salient traits of a noble life could be engraved by the chisel. He now begins to consider this bust no longer as a vulgar exact image, but as a carved biography. Illumined with these thoughts, the same mind will consider the donjons, castles, buildings of all sorts, as eloquent though mute historians.

Unfortunately, while phonograph records give us the privilege of listening at

MAIDEN LANE,
NEW YORK CITY.

THE MOURNER.

home to a wide selection of German, French or Italian singers, and while the museums give us, in faithful casts, reproductions of the most renowned plastic masterpieces, we can scarcely have more than mere fragments reproduced in architecture. Only once in a while do we see a full commemorative monument, a whole fountain, and we can never see a reproduction of a complete work of architecture otherwise than in photograph or in a small model. It naturally involves on the part of the person who has not seen those structure on the spot, some effort of imagination to have an idea of the scale. Yet, limited as these means of reproduction are, they go a long way in the education of the masses.

Even when seen in the monotone of a photograph. Nôtre Dame takes hold of the observer. The most ignorant person is impressed with the simple and austere grandeur of this monument. Where can the word expression be properly applied if not here? The front of Nôtre Dame, to confine ourselves only to this part of the exterior, expresses as much simplicity allied to grandeur, as one can read on the face of a prophet. Calm, truth, grace, power, these are some of the attributes of divinity expressed by the artist in this conception.

Will any formula help one to better religious architecture than the sight of this first among the masterpieces of its kind? Every one can see how the front grows more richly adorned as it rises as though it were the symbol of man growing out of the material into the spiritual. It is the apotheosis of a religion which never before was so visibly glorified. It is the expression of the triumphant Church, acknowledged as the common refuge of the people. On this front, more than in any obscure book of theology, are read the simplicity and greatness of religion; truth and aspiration, calm and confidence. Can one see this cathedral and not be penetrated with these feelings? The artist was certainly far ahead of his

"LA DANSE." BY CARPEAUX.

time; for even now his stone glorification of Christianity is superior to many poems.

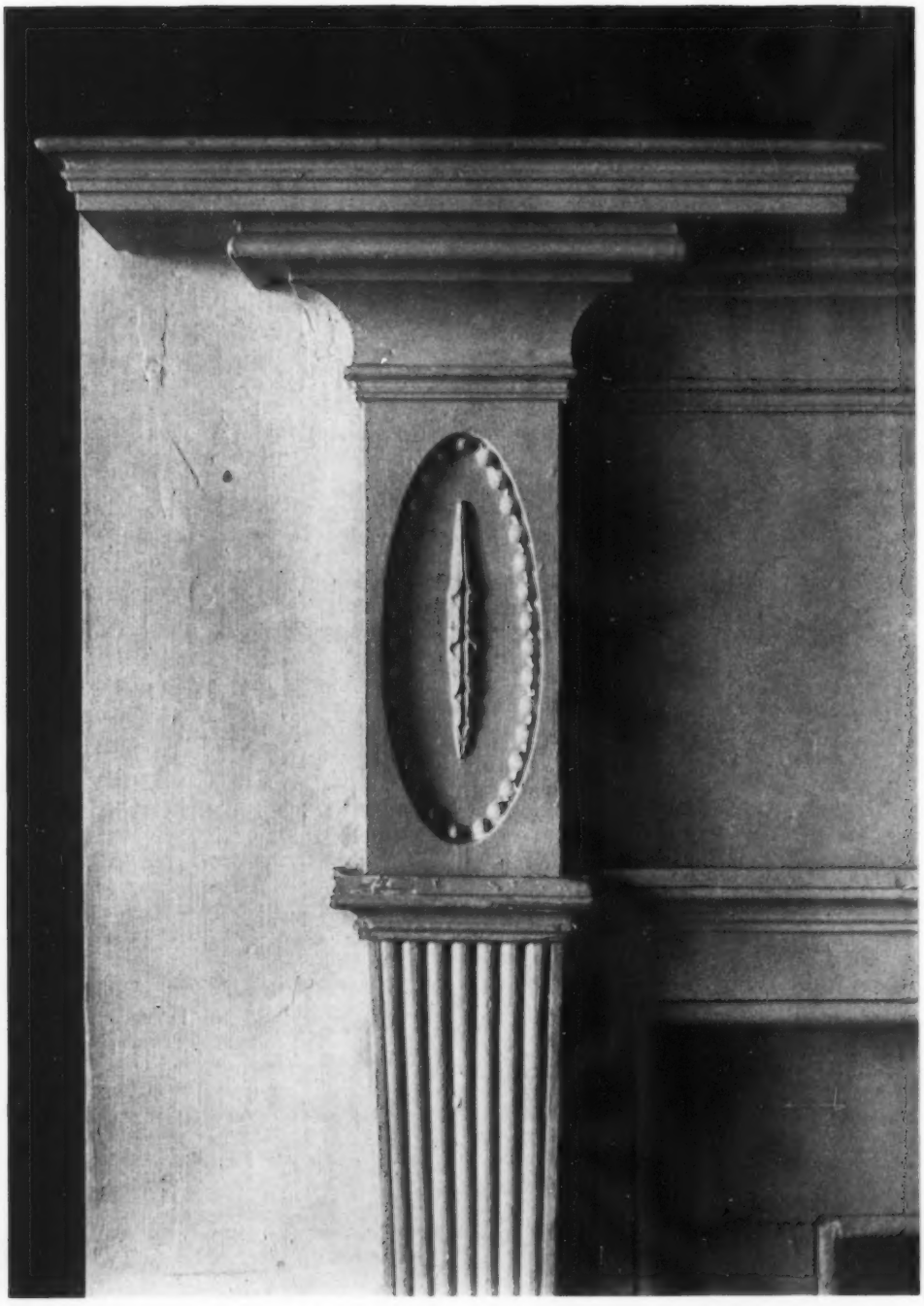
Now if we go from the cathedral to the town hall we shall, by the mere comparison, draw interesting conclusions with regard to the rules governing expression. The same principles were applied to both structures, but the needs were different; hence the difference in expression.

The late M. Guadet lays great stress, in his book, upon the word "Truth." If the art of the past is in any way educational, it is because it is truthful. No mask hides the deficiencies of the structure. No hypocrisy. In fact, one of the greatest beauties of Notre Dame is in the small material, stone or brick, that fills in the highest parts of the vault, between the ribs. It seems to symbolize to us the high importance given to the humblest members of society. Men are not what they seem, but what we make them. This is the teaching of the small unassuming bricks which fortunately the artist could not cover with paintings. A whole theory on society is here very simply materialized. In the face of such teaching, is the aesthetic alone to be our main quest, even to the detriment of expression? There are no ornaments on these vaults; but the simple filling with so humble materials as bricks is the more pathetic. It lifts the humblest to heavenly heights. The intellect is satisfied. What do we care for ornaments where the bare truth is so beautiful? There are legions of people who prefer Notre Dame to Saint Peter's of Rome; undoubtedly, truth is the first reason for this preference.

While calm majesty well suits the idea of religion as it is expressed in Notre Dame and many another church, the gayety of belfries is not less becoming to them. Look at several of them: Brussels and others. How cheerful they look. Their outlines are in perfect harmony with the gay notes of their chimes. Notice particularly the way the artist took advantage of the blue sky, to set it, so to speak, between the frail columns of the flourishing top. It is Prometheus stealing a spark from heaven to enliven man. There is nothing more cheerful than the sky and the colored clouds seen through the little arcatures of belfries, campaniles or spires. They, too, express the spiritual aspirations of society, by allying the terrestrial to the heavenly.

If one believes that a building has expression, whether the artist meant it or not, then a whole street, nay a whole town, must have its expression. What then should he think of our congested business districts and the jagged skyline? We hear people say now and then, "Oh, how much we prefer the even sky-line of European towns!" They are right. They only forget one thing, and that is, that the city planning in the old countries is entirely different from ours. Each square being the rallying point of converging thoroughfares, there is generally a feature at its centre, whether it be a fountain, a triumphal arch, or a commemorative statue; it is immaterial. The fact is that this centre of interest is the converging point of all the cornice lines in the different streets. It expresses an aged society, where each member tries to curb his will to that of the majority. If the latter decided that the central feature is to be the dominant note, all will submit to this decision and none will build a structure conspicuous enough to mar the effect of the public monument. It suggests discipline.

Our towns, particularly our business centres, suggest an organic period full of promises. What could not be expected from wise building laws allied to a love of beauty. Furthermore, these buildings suggest to a high degree the triumph of democracy of individualism. Yet the time is not far remote, thanks to the rapidly rising standard of general culture, when any architect will gladly abide by the law requiring that any building above a certain height must offer aesthetic merits. Then, you will hear no more refined spirits object to the "awful broken line" of the "downtowns" of our cities, for these gigantic buildings shall form a splendid architectural museum that will bring honor to the artist and to the country.



MANTEL DETAIL IN WESTERVELT HOUSE ON TEANECK ROAD, 1763, NOW OWNED BY MR. C. H. LOVERIDGE.

SOME EARLY DUTCH HOUSES IN NEW JERSEY

An Architectural Study of Origin, Evolution and Detail. Text and Measured Drawings by John T. Boyd Jr.

Photographs by Charles Cafferty

ARTICLE III.

THE first thing one notices about these details is their freedom. It is an architecture absolutely without the orders. In some rare cases there are mantels with little Tuscan columns, but they are not among the finest examples and are found side by side with freer forms. The overmantels in the Terhune house and in the Baron von Steuben house show a very rare use of fluted pilasters.

A freer and very exquisite channelling was often used which is found in many houses with slight variation. The theory of all these Dutch mouldings is a series of many fine parallel lines and shadows made by hollows, beads and fillets, beautifully varied and proportioned, all very delicate in scale. This arrangement gives a striking effect of enframement to openings. It is the same idea that Whistler developed in designing the frames for his paintings. This parallelism is carried out in all the mouldings, bases, chair-rails, cornices, etc. Further, the profiles used are very free and depart far from the conventional forms. They are well suited to the wood material and look better in execution than on paper. They remind one of the Gothic use of undercutting, hollows and rolls and also of the Greek flow and springiness of line. Admirable examples are found in the plaster cornices and wooden window architraves and in the bed mouldings of arches and mantels. The fine scale of some of them is surprising; the panel mouldings are so tiny that all the members cannot be drawn at the scale of one and one-half inch to the foot. No better effect for a small house could be obtained than in the trims of the Brinckerhoff house, which are only three inches wide. The average is four and one-half to five inches in most of the houses.

The deep reveals of the window openings afforded a fine chance for design of panels in the casings. In the Anderson house on the Main Street, Hackensack, the panel itself is channelled with vertical reeds in an interesting way. This house has finely profiled roll-mouldings around the fireplace opening. The builders were very fond of this reeding and they used it most successfully in the baseboards of the Hopper house.

The two plates of mouldings from the Hopper house published in July and the moulding in Plate 32 of the Brinckerhoff house (August) furnish a fairly complete summary of early Dutch-American mouldings. These profiles are found in nearly all the other houses with but very slight variations.

In the nineteenth century the doorways between the hall and principal rooms were often built with oblong transoms above them of simple sash-bar design, to give the same effect of openness that we seek nowadays with wide double doors. The old way is better, for the small door preserves the intimacy and individuality of each room which is lost when one compartment is hardly distinguishable from the next. These doorways are the cause of some fine designs, of which the arched doorway in the Hopper house is a good example. The

ENTRANCE HALL IN THE HOPPER HOUSE.

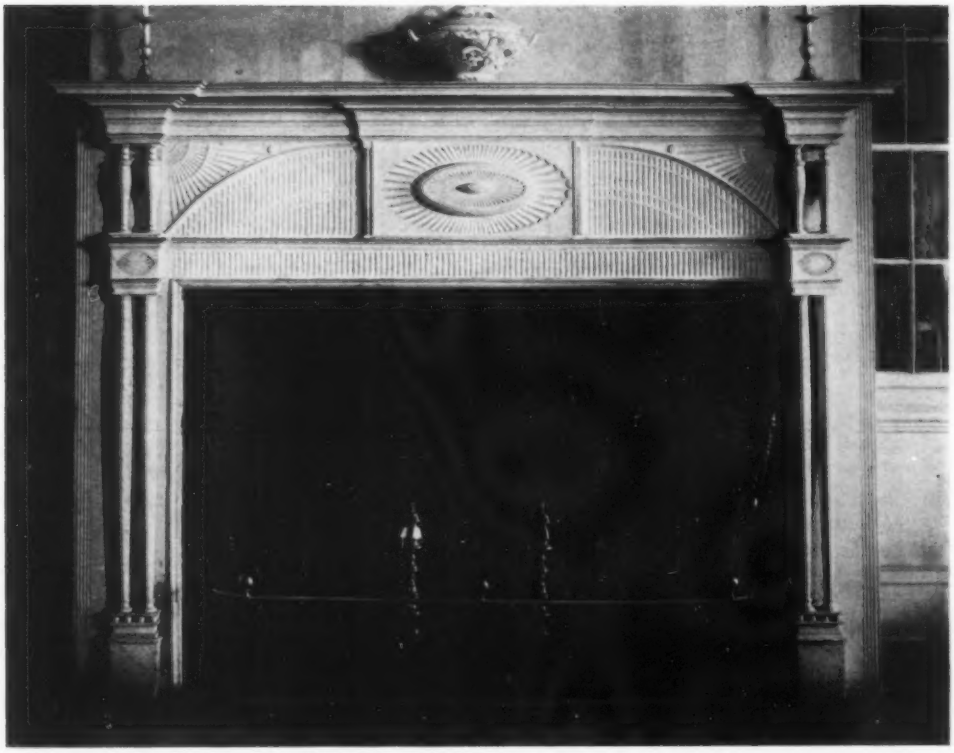
door itself was invariably panelled with two small panels above and four vertical panels below with a wide space between, in the middle, for the hardware. In the Hopper house this arrangement of panels is repeated in the Dutch door (where it probably began with the necessity for a larger division where the door breaks open), in the outside window shutters, and in the window casings—a remarkable refinement of design. The harmony of these houses is difficult to exaggerate.

But the great glory of the old Dutch-American interiors is the fireplaces and mantels. Free they always are, and unconventional often, with a very Elizabethan love for the odd and the playful. Yet many are as strictly designed as the most "restrained" purist could wish. The mantels stretch right across big chimney breasts that project well into the room, showing a big broad surface of wood with vertical reedings at the corners. This is a very strong treatment, and on this wood expanse the delicate proportions and detail of the mantel are splendidly contrasted—always the same sturdy old Dutch hearth. The critics who claim the Georgian work to be a little thin could never say the same of the Dutch interiors which are as sturdy even as the exteriors. A bold hand when strength is needed and a delicate hand when delicacy is needed; and the contrast emphasizes each.

The playful use of spindles has already been mentioned. They are always found under a frieze of gay "sunbursts," channels, etc.

Another type, less imaginative, is found in the exquisite mantel of the Vreeland house, and of the mantel in the Westervelt house on Teaneck road, dated 1763, owned by Mr. E. H. Loveridge. They are as perfect mantels as I have seen in all the district. The little figures

DETAIL OF HALL ARCH CAPITAL
IN THE HOPPER HOUSE.



DINING ROOM MANTEL IN THE HOPPER HOUSE.

and ornaments are of lead, set against the wood. There are also the two mantels from the Demarest house by the Saddle River, dated 1837, which are hardly less beautiful. Then the three mantel details taken from the houses of Mr. J. S. Mountfort at Dumont show a combination of the above two types.

Another simpler, but no less perfect, mantel is the one in the Brinckerhoff house with the vertical channelling under the shelf. There are still simpler mantels occasionally seen. A picturesque feature of these is a tiny closet fitted with shelves set in each side of the chimney breast, very like the medicine closets now built in our houses, but more sympathetic in design. Herein these old fellows kept their mellow Holland gins and cordials, their Curaçoas and, not least, their native applejack, a brandy distilled from cider, pronounced by certain connoisseurs to be of a quality equal to their architecture.

By this time toward the beginning of the nineteenth century the countryside had become pretty thoroughly American in its modes of life. The householders appreciated the refinement and elegance of the "Colonial" period, and filled their houses with fine models of the types of Sheraton, Chippendale and Hepplewhite furniture, many of which still remain. I have seen some extraordinarily tall clocks bearing the name of local clockmakers in Hackensack and Paterson. They must have been rarely charming, these stately old Dutch interiors. Some few examples of earlier Holland things are still left, notably some sturdy dressers of panelled oak, very mediaeval in character.

The Hopper house has often been mentioned in these pages, and its interior deserves some special notice. It was built during the years 1816-1818 to replace an older house across the road. Two skilled workmen, who came from

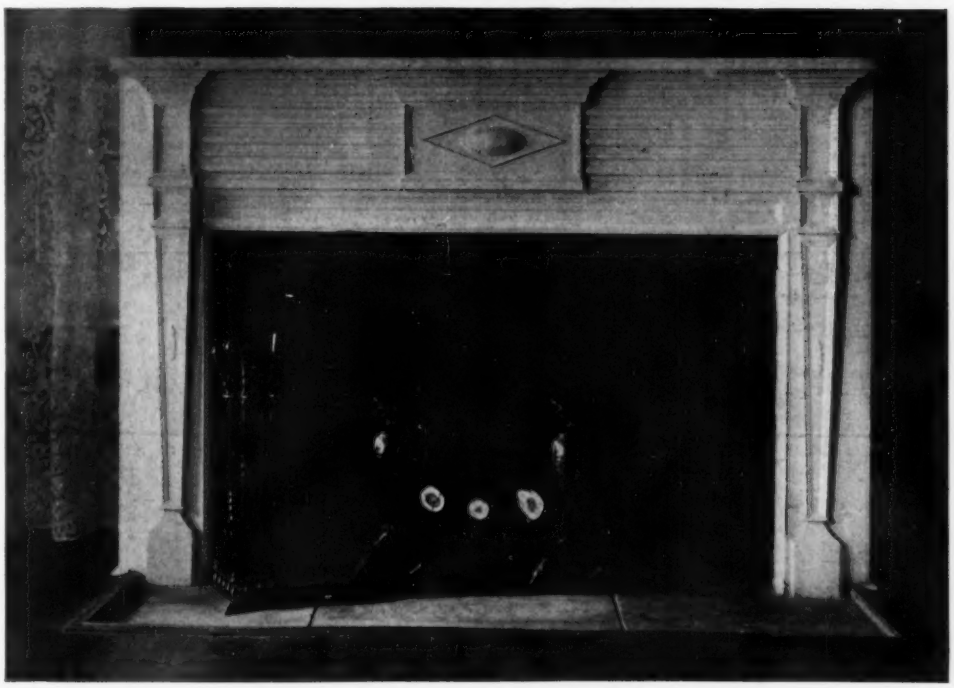
MANTEL IN OLD BEDROOM OF THE HOPPER HOUSE

LIVING ROOM MANTEL IN THE HOPPER HOUSE.

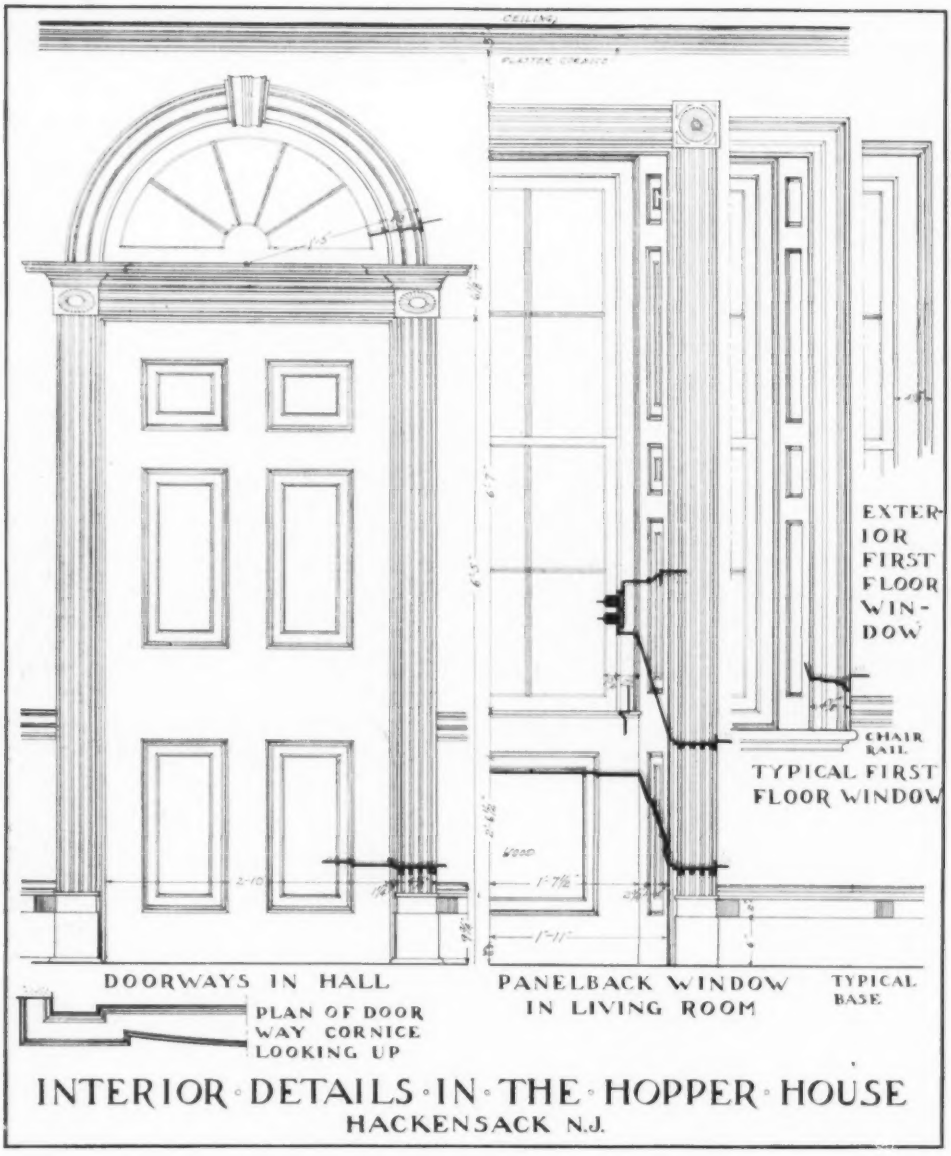
MANTEL IN THE DEMAREST HOUSE.

MANTEL IN THE VREELAND HOUSE.

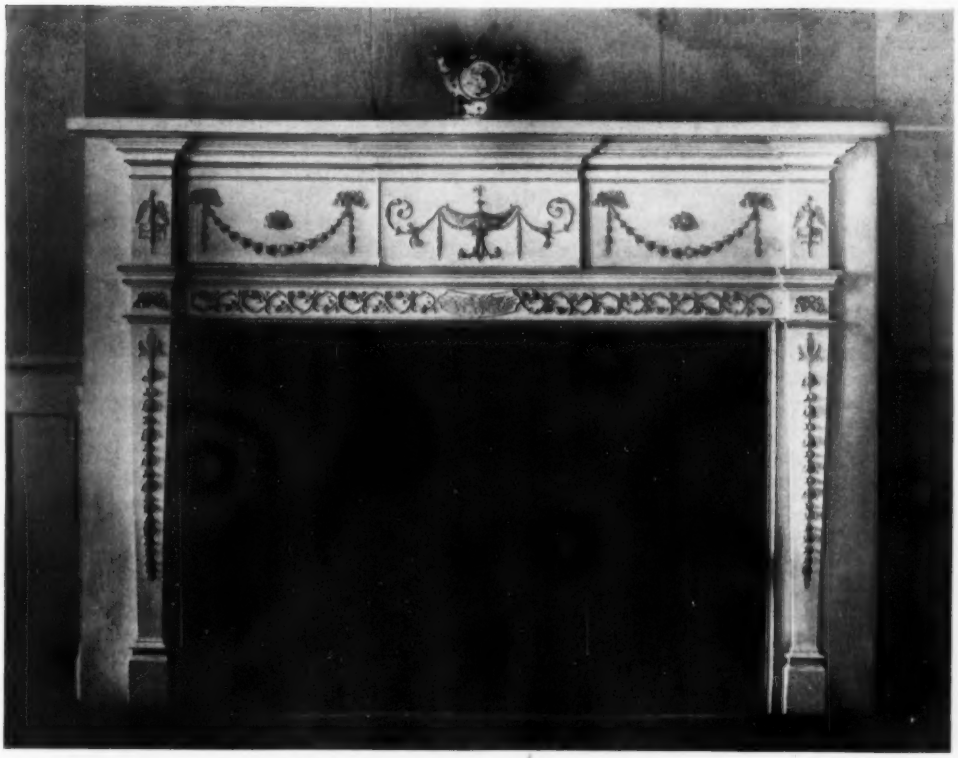
MANTEL IN THE WESTERVELT HOUSE.



LIVING ROOM MANTEL IN THE DEMAREST HOUSE.



INTERIOR · DETAILS · IN · THE · HOPPER · HOUSE
HACKENSACK N.J.



MANTEL IN THE VREELAND HOUSE.

outside the neighborhood, were in charge of slaves in the work. The south wing was built for members of the family but was used as a slave quarter within the memory of people still alive. This wing is very simple in character, with the low ceilings characteristic of the early dwellings. It is said to be later than the central part, and the tiny "lie-on-your-stomach" windows show the beginnings of the use of a second story, which came in the period of "Classic Revival." Still, the stonework of the front of this wing is unquestionably of older type than the central part and may easily have been taken from the original house across the road.

The front door is an example of the sturdy Dutch proportions set off by Georgian refinement. The enframement of this door is a modern restoration. Notice the ornament of fanciful lead details of flowers and beadings with the little lead female figure on top in the place of honor—all very "Adam" in quality. We have considered the mantels, trims, arches and doorways and must hurry on. The panelling is characteristic of the region, except for a little addition which I have noticed elsewhere in but few cases, though it is found in a house in Charleston, S. C., illustrated in the "Georgian Period of American Architecture." I mean the little strip of bead and fillet nailed on the face of the panel. The plaster cornices are also unusual, but they are found in the Ackerman home on the Hackensack River road, the details of which resembled those of the Hopper house very closely.

The whole effect of the Hopper house is one of rare spaciousness, comfort and delicate harmony. The ceilings are higher than some others—about nine feet five inches—and the details are fine, indeed. Very different it is from the humble Dutch cottages of the first settlers, but it bears with them the same spirit of the Holland home.

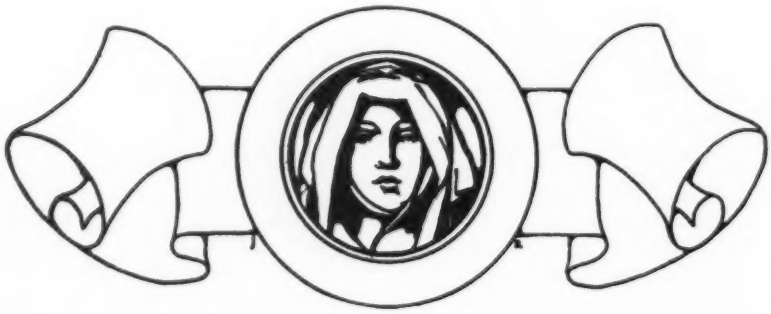
I have mentioned the Brinckerhoff

house on the Teaneck road, of uncertain date. Inside and out it has suffered almost no change—the most perfectly preserved of all the houses. Its details are exquisite. The Demarest house by the Saddle River has as fine an interior as any, with only the faintest possible indication in its trim of the "Classic Revival" style.

This period of the "Classic Revival" brought immediate changes in these houses. People wanted to live upstairs and added wooden ells and wings. This work is clumsy and heavy compared to the earlier work. The best it did was to add not ungraceful square posts under the overhanging roof to form a porch. The low second stories of wood above the stone first story seen in some houses is a change of this period; the old roof has been removed or pushed up and the space between it and the stone wall timbered up—by this time there were few slaves left to cut and carry stones—to form a low second story with the quaint little "lie-on-your-stomach" windows before mentioned.

This raising of the roof—in both senses of the phrase—was done in the right wing of the Hopper house. The detail of wooden cornice and dormers, as well as of the inside trims, is much heavier and bolder than anything else in the house. The curved joints in the stones of the centre part of the house show clearly where the original roof of this wing joined the wall, and leave no doubt as to what happened. Sometimes these changes add a picturesque grouping that is quite effective. All these developments of the second quarter of the nineteenth century have been confusing to investigators. They have obscured actually and in the minds of many people the real Dutch-American house which is as standard and unvarying and simple in type as the Greek Doric temple. It is this standard, or "Classic" type which I have tried to extricate from the later changes that have almost buried it; and I have done nothing in these pages if I have not made this point clear. While we mourn these "Classic Revival" changes, they have a certain bald dignity about them that is not unpleasant—far better, indeed, than the horrible Victorian damage done lately.

This finishes the study of the Dutch-American houses. They are fascinating symbols of the idea of hearth and home, the old Teutonic traditions of northern Europe. I think it is valuable to know that the flame of this ancient hearthfire was carried to our country nearly three hundred years ago and burned for two centuries, undiminished and unclouded. It must have been a rarely picturesque countryside, this soft landscape of rolling hills and broad meadows dotted with these stalwart cozy stone houses of sweeping gambrel roofs. We regret that so little of it remains to us to-day.



The NEW VIRGINIA MILITARY INSTITUTE

BERTRAM GROSVENOR GOODHUE, *Architect*. By EUGENE B. HOWLAND

ON a plateau just within the town of Lexington, commanding the entrance to the Shenandoah Valley, stands the Virginia Military Institute—a college accorded a more enthusiastic loyalty and looked up to with more pride than any other institution in the South. Incidentally, it is the oldest State military school in the United States, having been founded in 1839.

The visitor from the North leaves the train at Buena Vista and is fortunate if his impatience prevents his waiting there three hours for the branch train which would take him to Lexington. The alternative is a drive of nine miles over the Blue Ridge Mountains in the cool of the morning. It is a beautiful rolling country; some of it well cultivated, but much of it too rough for the plow, with here and there "befo'-de-war" log cabins set in acres of scrub. This long drive over the hills, in the fresh mountain air, cannot fail to put one in a receptive mood.

About two miles from Lexington a gap in the mountains opens the valley before you and shows, on the opposite slope, the Institute buildings gleaming white amid their trees. The great barracks dominate the group, and very severe and military they look standing out on an eminence as now and again you catch glimpses of them from the winding road. To reach the Institute grounds, after passing through the quaint narrow streets of Lexington, you cross the campus of the Washington and Lee University with its row of impressive Greek buildings, shaded by stately elms. Facing the main hall, there stands a small vine-covered chapel of somewhat severe design; and in answer to your question the driver tells, in a voice made soft by reverence, that within its walls is the tomb of Robert E. Lee. There is something in the man's manner which, Northerner though you be, causes you to uncover your head as your vehicle slowly passes the resting place of that great man.

A short street, not more than a city block in length, lies between the grounds of the "Washington and Lee" and the two simple brick gate-posts, mellow with age, which mark the entrance to the Virginia Military Institute.

A long drive bordered by a double row of maple trees leads to the barracks. On the left is the parade ground, a great open stretch covering the top of the plateau. Surrounding this plateau, like the walls of a huge amphitheatre, stand the rugged peaks of the Blue Ridge Mountains. Across the parade is a row of officers' houses—quaint buildings in the style of the early Gothic revival, harmonizing with the barracks. They are very charming and livable, especially the superintendent's house with its long enfilade of beautiful rooms so suggestive of Southern hospitality.

The barracks building forms the focus of the whole group. Severely plain it looks in the photograph, but actually it has a very real beauty and dignity of its own. Its walls are a warm, grayish salmon, mellowed and softened by age. Tradition says that they were originally gray, following the precedent of the buildings of the United States Military Academy. But, in spite of many efforts to preserve the original tone, the salmon brick of which the building is constructed has always stained it to the present color. At West Point the gray of the native stone buildings fits perfectly into the hill landscape, but in this less rugged setting such walls would be cold.

The four-story barracks building is so severe that, had it not been built by a

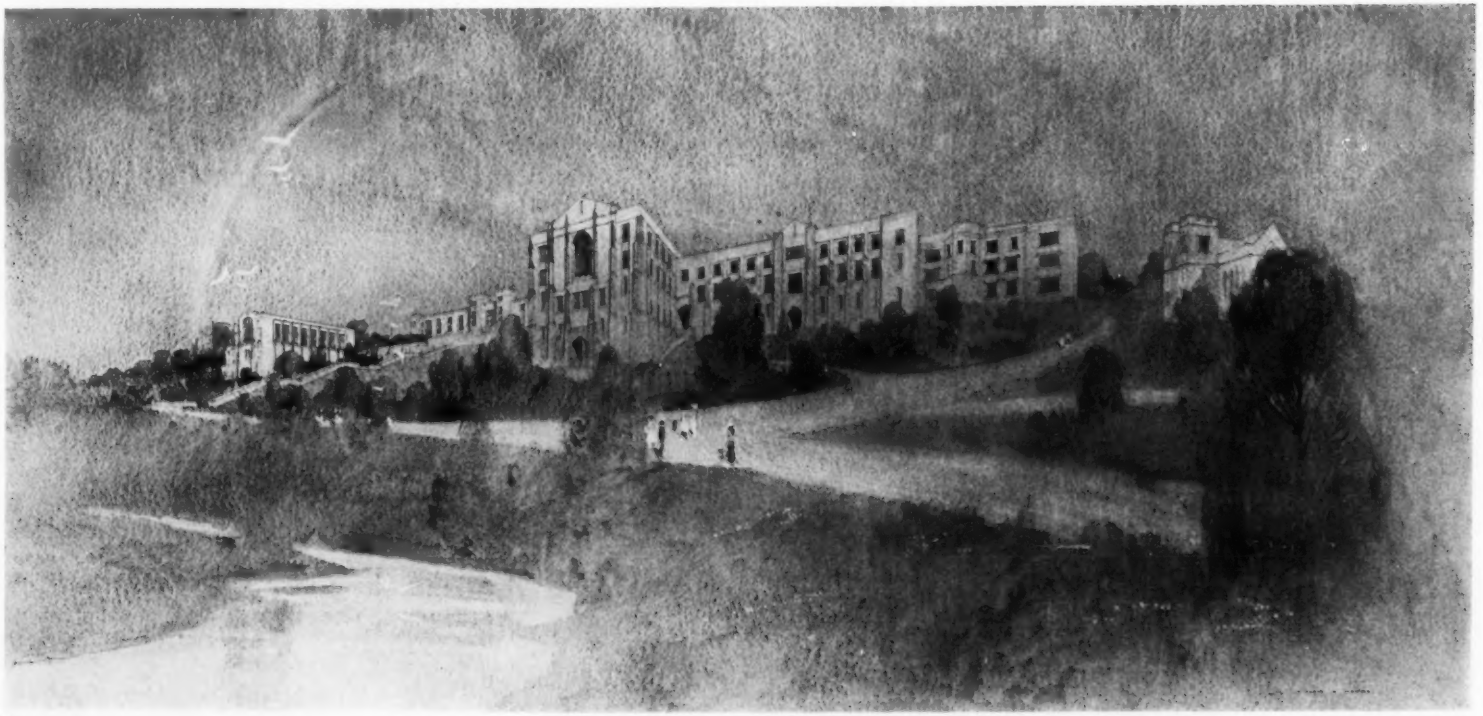
sure hand, it would have been merely a factory—a "barracks" in the ordinary homely sense. Grouping the windows of two stories into a single unit gives the building dignity. Otherwise it is severely plain, with just a battlement at the top. Yet the sally-port, with its flanking towers, is a really noble composition. In front of the barracks is the formation parade ground, where the cadets assemble many times daily to march to the mess hall, drills and parades. Opposite the sally-port stands Houdon's statue of Washington, which General Hunter took during his raid and sent into West Virginia. The bronze has a beautiful patina, the color of very old silver. In the new scheme this statue will remain in its present position, where, at the head of a long flight of steps, it will mark the axis of the new approach. On either side of the statue, along the crest of the hill, for the ground falls away here very abruptly, is a row of fine old English and French cannon cast in bronze, bearing coats of arms and having handles formed of twined serpents. These guns come down from the early French and English wars. They are not Institute trophies, its history dating back only to 1839, but were presented by one of the early Governors of Virginia.

In 1816 the Legislature of Virginia established an arsenal at Lexington. Its object was to protect the valley and to house about thirty thousand stacks of arms. A company of twenty-eight regularly enlisted men was maintained to guard it. Lexington then, as now, was a small quiet town and its citizens did not welcome this soldier element.

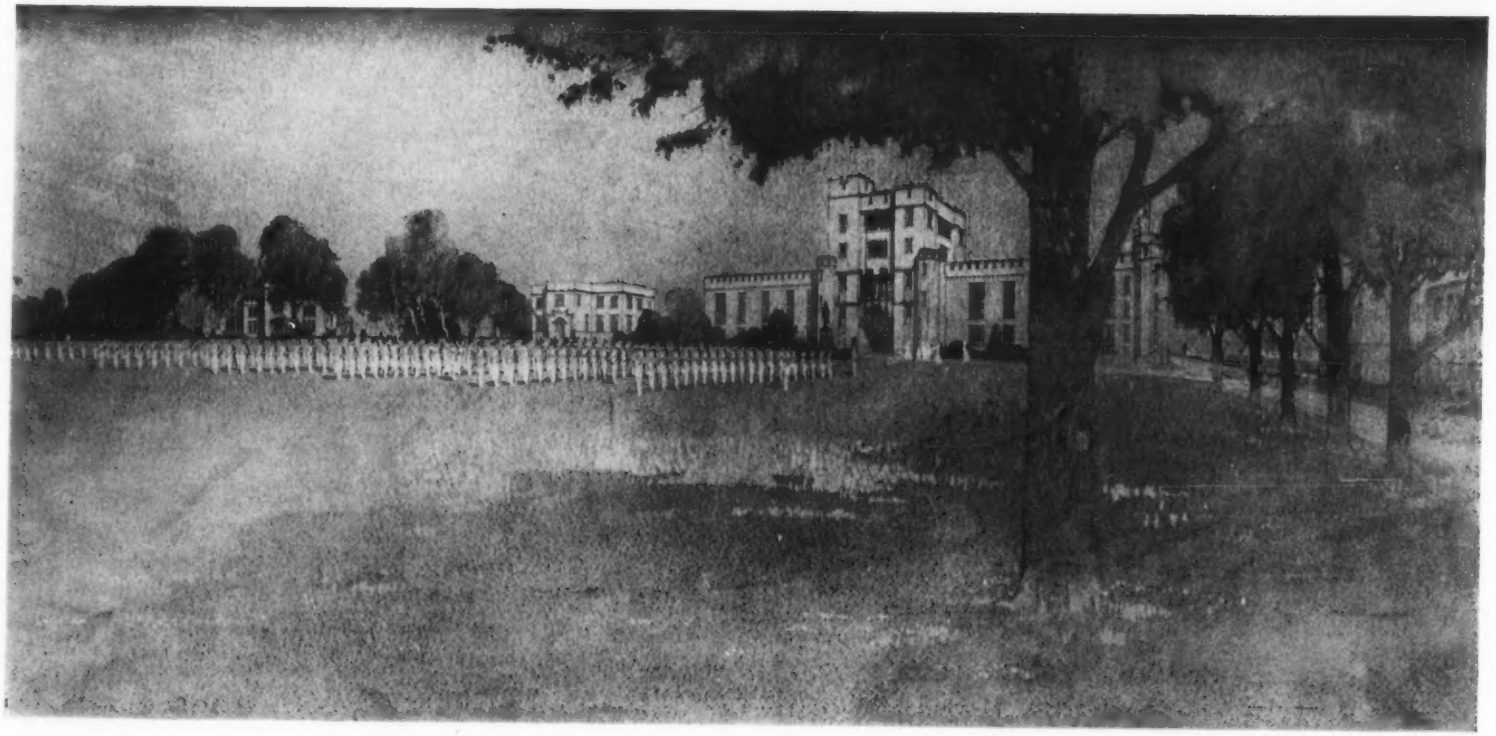
In 1835 it was suggested that the six thousand dollars a year which it cost the State to maintain the guard be used to pay the expenses of a military school, the cadets of which should guard the arsenal in return for the educational advantages received. This plan was adopted, though the funds available—the six thousand dollars a year—were absurdly small and the buildings were in such poor condition as barely to afford shelter.

There is not space to tell the story of the struggles and sacrifice of the first years. Through the heroic efforts of a few men, all obstacles were overcome and the future work of the school made possible. Officers and cadets bore privations and hardships with a spirit that has been an inspiration ever since, and which was a foundation for that spirit of self-relying independence which has characterized the Institute's history. For it has usually met its difficulties itself, succeeding whether help came from outside or not. The State has undoubtedly been generous, for it is proud of its school, but the Institute's achievements have been, in great measure, due to its own effort.

The formal opening was on November 11, 1839, when thirty-three cadets reported for duty. In a general way the course was modeled upon that of the Military Academy at West Point. The aims of the two schools, however, were very different. The curriculum at West Point was designed to give the cadets the best possible education to fit them for army officers. Here the aim was and is to turn out men capable and efficient in many walks of life, the military element being emphasized rather for its inherent benefits in the matter of discipline and health than as a training for future military leaders, although that consideration was by no means overlooked. Indeed, when the war broke out, in this latter field alone, the Institute amply justified its maintenance as a State institution. But, for years, its graduates as a class had done more important work than leading Virginia's armies. In the forties, the profession of a teacher in the South was held in slight esteem, its members were recruited almost entirely from failures in other professions. To meet the demand for competent instructors the Institute was created a normal school in 1842. This meant that each of its graduates bound himself to serve at least two years as a teacher. The cadets were drawn from the best stock in Virginia. As the result of their work the standard of education was raised greatly during the years immediately following. Another field of usefulness grew out of the introduction of a course in scientific agriculture. Here again the Institute was first in the field and won considerable fame through

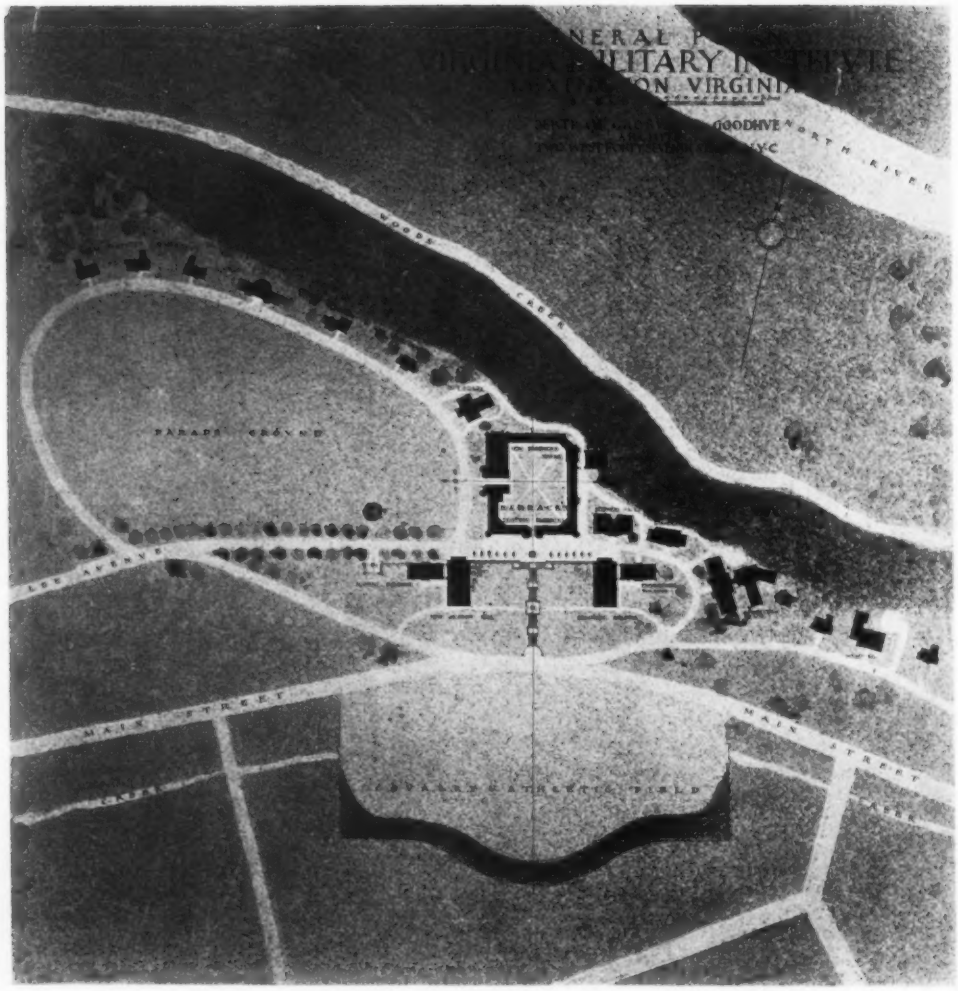


NEW VIRGINIA MILITARY INSTITUTE, FROM THE ROAD INTO LEXINGTON. BERTRAM GROSVENOR GOODHUE, ARCHITECT.



THE COMPLETED BARRACKS, FROM THE PARADE GROUND, VIRGINIA MILITARY INSTITUTE, LEXINGTON. BERTRAM GROSVENOR GOODHUE, ARCHITECT.

BARRACKS AND POWER HOUSE GROUP, FROM THE RAVINE OF WOOD'S CREEK, VIRGINIA MILITARY INSTITUTE. BERTRAM GROSVENOR GOODHUE, ARCHITECT.



PLAN OF THE NEW INSTITUTE, SHOWING THE PROPOSED CAVALRY AND ATHLETIC FIELD. BERTRAM GROSVENOR GOODHUE, ARCHITECT.

the experiments of Lieut. William Gilliam on soils and fertilizers.

The influence and importance of the Institute grew steadily; each year saw its members increase, its courses of instruction advanced until, at the outbreak of the war between the States, it had attained a standard of military and academic excellence second only to that of West Point.

With the war came an opportunity for its cadets and graduates to show what their training had really meant, and nobly did they respond. In 1861 the corps was ordered to report for military duty at Harper's Ferry and Richmond, where the Confederate forces were mobilizing. The cadets showed themselves most able drill masters in getting the unwieldy mass of volunteers in shape. The success at Bull Run has been attributed with much justice to the thoroughness of this work. Its graduates furnished the armies of Virginia with 811 officers and the Union armies with fifteen.

That this was appreciated in the North is illustrated by Lincoln's reply to an impatient politician who demanded to know why he did not crush the Confederacy and end the war. "I would, but that they have a school down there in Virginia that furnishes them new officers as fast as the old ones are killed."

In addition to supplying commissioned officers, the Institute furnished a host of sergeants, corporals and privates, thus gaining for itself the nickname of "The seed corn of the Confederacy." Perhaps most important of all was the part the Institute's *ésprit de corps* played in the brilliant career of Stonewall Jackson.

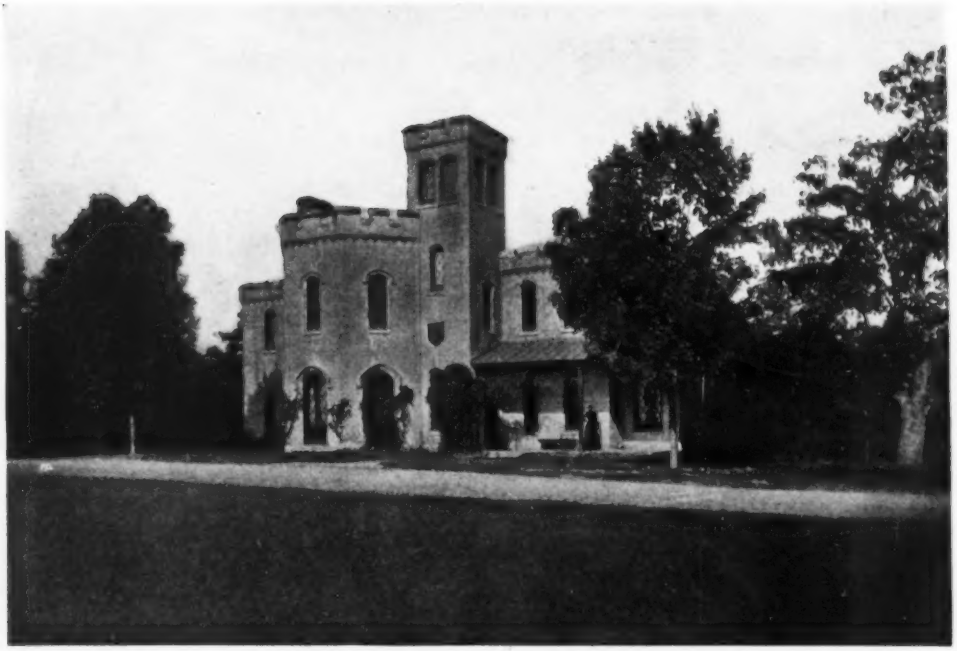
Major Thomas J. Jackson had been called to the chair of Natural and Experimental Philosophy in 1851. In the years that followed he had thoroughly won the confidence and loyalty of his students. When the war came, these very students formed not only a large part of the staff upon which he had to depend but they were also scattered through the ranks of his brigade. Jackson was noted for his ability to call forth the sympathy and enthusiasm of his men. In consequence, they responded to his orders as they did to those of few other generals. How much of this must have been due to the presence of the young men who idolized him! That he felt this is shown by his repeated public references to the part which the Institute played in his victories.

No one questions the brilliancy of Jackson's strategy and his fame has added lustre to the Institute that he loved, and where, in accordance with his wish, he is buried. He is a part of the great tradition of the school.

The cadets were present at three battles during the war, but only took an active part at Newmarket, where they won lasting glory. All through the winter of '64 the corps had been restless and eager to leave for the front—at one time going so far, in a mass meeting, as to tender their services as a body to General Lee. On May 11th, in the dead of night, the long roll was sounded; standing in front of the barracks the cadets heard, read by lantern light, the orders summoning them to the aid of General Breckinridge at Staunton. They started at six in the morning, and after a two days' march reached the regular troops. Like the English at Brussels the night before Waterloo the cadets, after dress parade, scattered to the dances in different parts of the town. All of the next day they marched through driving rain down the valley. After a night in the open field, the march was resumed for the fourth day, when the enemy was encountered at Newmarket and the front of the Confederate forces was driven back. On the following morning General Breckinridge took the offensive, although he had a considerably smaller force than the Federals; and, starting at dawn, marched his army back to Newmarket.

There are many accounts of the battle which ensued, all agreeing as to the gallant part played by the cadets. In the first part of the action they were held as reserves in the rear, but as the day advanced they were steadily moved forward.

By the middle of the afternoon, as Breckinridge pressed the Union forces, his right and left wings drew apart, leaving a gap in the centre of the line. The corps of cadets moved up into this gap,



AN OFFICER'S QUARTERS—VIRGINIA MILITARY INSTITUTE.

and advanced under continuous fire for over half a mile, until they were well in front of the rest of the battle line, and drew up behind an old wall. The maintaining of this position drew upon them the concentrated fire of all the Union batteries. Noting that the Confederates were hesitating and wavering, and that the centre was weak, the Union general directed a charge against the latter point. Had the cadets not held their ground valiantly, the day would certainly have been lost. At the very time when their lines were being constantly opened to allow veteran soldiers—driven back by the heavy fire—to pass to the rear the command came to advance. Then began their memorable charge across a wide field of waving wheat straight at Von Kleiser's battery, which all the time kept up a furious fire. On they stormed until the guns were captured. Everywhere the Northern forces were fleeing and the day was won. After five days of constant marching, it was a splendid record for these young boys—on their first day under fire. That this was men's work is shown by the loss of 25 per cent. of the corps in killed and wounded.

The Union armies, however, were closing in on the Confederates and Hunter, marching down the valley, took, and afterwards destroyed, the Institute buildings; after several hours of bombardment the thick brick walls of the barracks still stood; he then applied the torch and left the Institute—a melancholy ruin. Every building was burned to the ground, except the superintendent's house, in which lay his daughter, too ill to be moved. It has always seemed a pity that, against the protests of his officers, Hunter should have destroyed the library, the scientific collections and the houses of the professors.

To men of less faith the end of the war would also have meant the end of the Virginia Military Institute. Its buildings in ruins, its credit gone, a heavy debt to face and the State government in confusion, there seemed little hope of the school's ever reopening.

But the same heroic story repeated itself. Colonel Smith, the superintendent,

SUPERINTENDENT'S QUARTERS—VIRGINIA MILITARY INSTITUTE.

immediately called the faculty together and outlined a plan for restoring the ruins. Work was started with private aid. But fifty thousand dollars was needed; and, as security for a loan of this amount, the faculty pledged a third of its salary yearly. With this money the Institute was rebuilt and the school opened.

In the struggle to rebuild the Institute—a struggle for actual existence—the difficulty was always to meet pressing needs, and questions of design and general plan were not too carefully studied. As a result, in several instances, buildings were erected only to be torn down soon after, or that are now waiting to be demolished, after a comparatively short time of service, because they were entirely unsuited to the needs of the growing school.

With the close of its seventy-fifth year a new era of expansion seems about to start. The Board of Visitors, feeling that adequate provision should be made at once for present and future needs, turned to Mr. Bertram G. Goodhue, whose large experience in academic problems, and especially his great work at West Point along similar lines, particularly fitted him, they felt, for the task.

The first requirement was an enlarged parade ground. To gain this end it was necessary to push back the present officers' quarters to the edge of the ravine through which flows Wood's Creek, and to relocate the road leading to them. This readjustment practically doubles the area of the field, though leaving it somewhat irregular in shape.

This portion of the work will be finished before the Institute opens in September. On this newly located road, beyond the superintendent's house, three new houses for officers are building. These will be in character with the older houses, though somewhat less Victorian.

In November of this year will be celebrated the seventy-fifth anniversary, and before this reunion the committee hopes to have funds sufficient to carry out the scheme practically as shown. One of the reasons why, in the past, it was found difficult to place new buildings properly

was that the group had no unity—in a word, no general plan. Mr. Goodhue has established a major axis by creating a monumental approach from the main road into Lexington. This approach takes the form of a terraced flight of steps up to the main sally-port of the barracks, terminating at the platform on which stands the statue of Washington. The formation parade in front of the barracks will be widened; and lining this on either side of the stair, forming a great terraced forecourt, will stand, on the right, the large new Academic Building with its departments of mathematics, chemistry and others and, on the left, the new Jackson Memorial Hall, built to replace the present one, which, in turn, will give way to the new wing of the barracks. This building will contain, on the main floor level, a spacious memorial hall for reunions and great occasions of all kinds, as well as for chapel. In the story below will be a gymnasium, where the dances will be held, the running track serving for a visitors' gallery. Below the gymnasium, in the basement, there will be a swimming pool, baths, and so on.

Owing to the slope of the ground, each of the levels can be entered from the outside. Beyond each of these there will be later another large building.

On this axis, but across the road, it is proposed to place the Cavalry and Athletic Field, which, as its name suggests, will be used for drill, football and athletics generally. Into the hillside, at the back, will be banked the seats. In time, too, other buildings may flank this axis on the road. On the same side of the road, and between Jackson Hall and the entrance to the grounds, the alumni are to erect a building for their own accommodation on the occasions of their reunions.

The other axis runs through the barracks at right angles to the first, and in general follows the centre of the parade ground. Now it is marked by a rather trivial commemorative gateway, built to connect the present Jackson Memorial Hall with the barracks. This hall is a very unfortunate building, entirely lacking the dignity that a memorial to so great a man should possess. Its rebuilding into a wing of the completed barracks will therefore cause regret to no one. There will still be a Jackson Memorial Hall—the new building opposite the barracks—one much more simple and genuine, one more in sympathy with the heroic dead.

Originally it was intended to complete the barracks in the form of a hollow square. Now that additional quarters are necessary, Mr. Goodhue proposes to do this by carrying out the simple lines of the first scheme. The complete structure with the adjoining power house will make a very imposing mass rising abruptly from the ravine.

The present commemorative gateway will give place to a great square tower not high but strong. This will serve as a focus for the group when seen from the parade ground or from the entrance. Before this will stand the statue of General Jackson, as it does to-day, flanked by the famous guns of his battery.

Strong emphasis at this point of the plan is important for another reason. It has been proposed to connect the grounds of the Washington and Lee University with those of the Virginia Military Institute by means of a broad boulevard. Should this ever be accomplished the boulevard will enter the parade ground opposite this gateway.

It is pleasant to see any good school broaden its field of usefulness—especially good to see a Southern school developing, for the South has been handicapped in this respect—best of all is it to see a college with the Virginia Military Institute's record of efficient successful graduates take its rightful place among the great schools of the county; for we need strong men to-day, perhaps more than ever before in our history.

THE ARCHITECT

BY WILFRED BEACH

This installment of Mr. Beach's series deals mainly with a subject on which there is a lively difference of opinion. Mr. Beach has failed, he says, to discover marked evidence of any evolution of specialists in architecture; on the contrary, prosperous architects are witnessing the increase of their practice through the acquisition of work of every description.

THE SPECIALIST

It is quite the fashion to allude to the present as an age of specialized endeavor. We are accustomed to read and to hear that this or that avocation, formerly a single calling, is now divided into the several occupations of skilled specialists.

Perhaps the profession of the civil engineer serves as the best illustration of this modern trend. We all remember when the chief occupation of the civil engineer was land surveying. His more diversified tasks were semi-occasional ventures, not too confidently undertaken. The average engineer of that time, like the contemporaneous architect, was not overly well educated—had probably gotten his training by apprenticeship rather than through technical schooling.

To-day, engineering is a science of several branches, each of which offers opportunity for intensive specializing. The public has been told that this is also true in architecture. It may be difficult to appreciate readily why it is really not true at all, except in the one phase of architectural engineering, which latter is, of course, engineering rather than architecture.

But architecture itself, as practiced today, has not been divided among specialists. A little investigation of those who claim the contrary will convince one of the fallacies of their argument.

The fact is that the highest type of practitioner will put the best that is in him into each problem he attacks—at least to such an extent as his other duties will allow. The result is that the first endeavor of such an architect along any given line is begun with as complete an accumulation of data on the subject as has been acquired through all the several experiences of his "specializing" competitor. The latter admits that he did not so prepare himself, but chose to acquire his knowledge through his own experiences (at the expense of his various clients) rather than by an exhaustive study of the experiences of others. It is not difficult to determine which man is most to be depended upon.

Still, it is urged, a man must profit by his own experiences. This is true, but is quite another matter than the evolution of the specialist. Every building of a certain type executed in the office of an architect renders that office more efficient the production of the drawings and specifications for such a structure. This is especially true of the specifications and details. Such architect can, therefore, produce subsequent service for structures of similar function at a much less office expenditure than was chargeable against the first. There is seldom much (if any) profit accruing to an architect from the production of the drawings for a building for which no previously planned prototype exists in

his archives. The first effort must bear all the expense of research, collecting and tabulating data, investigating kindred edifices, evolving particular details and otherwise serving to educate the designer and the draftsmen in the special phases of the problem.

Obviously, the conscientious practitioner cannot evade this expense and is, therefore, handicapped in competing for work against a "specialist" who can, if he chooses, offer to reduce his fee, knowing his advantage in the possession of considerable pertinent classified data. But such advantage is distinctly a matter of the architect's office economy and has naught to do with the client's affairs save only as it is reflected in the fee charged. And certainly the client who will favor a candidate under influence of a reduced fee is taking quite too much of a chance. Such saving is, in any event, exceedingly small compared to what may be lost by lack of proper attention by the architect.

It may be that, some time in the future, architecture will develop more or less specializing. We notice some indication of this in present day factory and railroad work, though much of this may truly be considered more as engineering than architecture. From which it may be deduced that, if specializing in architecture does come about, it will be by way of narrowing the field of architectural practice proper down to the province of the artist designer, who will have to do only with the plan and façades of a structure, and their correlation, leaving the structural and other engineering details to specialists, who will operate in limited and carefully developed zones.

On the other hand, there seems even greater tendency in the opposite direction. Prosperous architects witness the increase of their practice through the acquisition of work of every description. Some do more of one sort than another; but each undertakes practically everything offered, and performs his tasks well, according to his custom, and quite regardless, as a general rule, as to whether or not he has previously turned out similar kind.

The term "Associate Architects" is commonly used to describe the relationship of architects in connection with the work of a single structure, as distinct from a continuing partnership arrangement. The value of such association naturally depends upon its underlying purpose and the manner in which the service is performed by the associates.

In some cases, it is to be feared, it is merely a method of acknowledging the service of an obligation to some "business-getting" architect in using his influence toward directing the "job" into the office of his whilom associate, the latter performing the duties of the architect and paying the "steerer" a small commission.

Again, there is the case of the rapacious city architect, who covets some plum in the territory of his no less competent provincial confrere. In order to satisfy local loyalty and overcome the advantage of his rival's accessibility to the site, the city man enters into association with an incompetent (not otherwise in the running), who undertakes to handle the field work for a portion of the fee.

If those associated are practicing in the same locality, the work may be carried on in the office of either, or in separate chambers, independent of either office. The latter method is, as near as may be, ideal; has been proved so with several large structures. One of the associated architects, or a competent man selected by them, is detailed in actual charge of the men assigned to the work. The architects themselves confer as frequently as the necessities of the situation demand. There is no question but that it is often proved in such cases that "two heads are better than one." The client thus derives a considerable benefit. Incidentally, he should accordingly pay a larger fee than is charged for the services of a single architect. Such extra commission is too seldom provided. The result is that, although the associates have each spent as much time on the problem as either would have devoted thereto if operating independently, yet the individual profit is cut in two or, perhaps, three.

Here we have the chief objectionable

feature of such deals. Too often the arrangement is merely a matter of convenience brought about through the exigencies due to close competition for the work. Two friendly applicants may offer the combination of effort, calling attention to its advantages, and later discovering financial loss, rather than profit, in the bargain.

Notwithstanding the abuse of the scheme and the objections due to such improper operating of it, one must still admit its considerable advantages when properly handled. Architects are, however, quite at variance in their opinions on the subject. A certain firm of very high standing advised a remote practitioner, to them unknown, that they would gladly work as associates with him on a given work; all drawings to be made in the office of the latter and submitted to the other firm for approval and criticism before signatures were attached. For such service they asked a fee of one per cent of the cost. This proved quite sufficient for the few hours spent in reviewing and corresponding; but the amount should, of course, have been added to the fee charged by the local architect instead of being extracted from his remuneration. However, he was helped by the experience and probably considered it worth while, even though not financially profitable.

Contrast the attitude of these high class practitioners with that of another firm with a practice as large as the largest who, when a similar suggestion of association was made them, exclaimed "What, educate our competitors to our methods? No, thank you; we are not in that business."

Thus, there is great variety of opinion in the profession as to the propriety as well as the benefit of these temporary partnerships. But, even the real partnerships between architects are many times rather loosely held together. We see frequent instances of partners acting independently on specific work.

THE CONSVLTING ARCHITECT

The term "Consulting Architect" does not bear an unfamiliar sound, yet there are not many individuals who have chosen to so style themselves. This may appear strange in view of the large number in the brother profession who practice as "Consulting Engineers."

But there is a considerable difference between the ethical standard of the engineer and that of the architect. An engineer can be a contractor and still retain his ethical standing. He is none the less an engineer, even though the major portion of his work may be commercial, rather than professional.

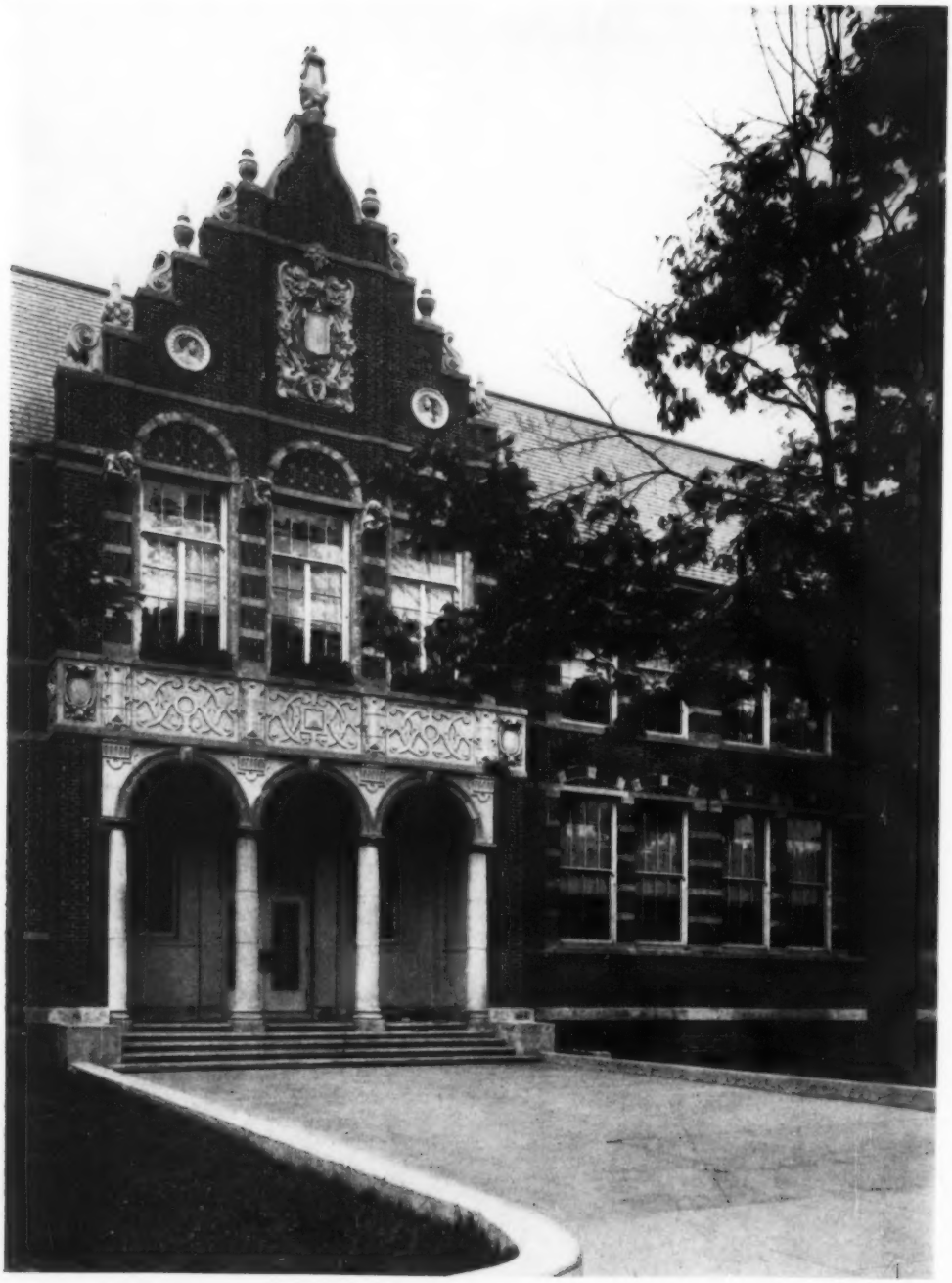
This is not true of an architect. According to present day ethics, a person ceases to be an architect as soon as he becomes a contractor. He can personally superintend building operations for an owner, employ labor and let sub-contracts; but, as soon as he assumes the responsibility of a contract, he loses his ethical standing.

In engineering, therefore, there are the two classes, equally ethical; the contracting engineer and the consulting engineer. Likewise there be those who combine both functions in a perfectly proper fashion.

In architecture, on the other hand, we have but the one class, the consulting architect. Hence the use of the descriptive adjective is superlative, and only adopted as a business catching expression in the same manner as "specialist" is often used.

An exception to this is the case of an architect who is actually consulted by another and does expert work on a project, work of such character that it is deemed more appropriate for him to affix his signature over the title "Consulting Architect" than to use "Associate Architects," as is more customary.

The consulting practitioner in any profession is necessarily a specialist. Both are lacking in architecture.



CENTRAL PAVILION—RIDGE SCHOOL, NEWARK, N. J. F. E. GUILBERT, ARCHITECT.

MODERN AMERICAN SCHOOLHOUSES

Some Recent Examples of *Specialized Buildings* GUILBERT & BETELLE, *Architects*

By RAWSON W. HADDON

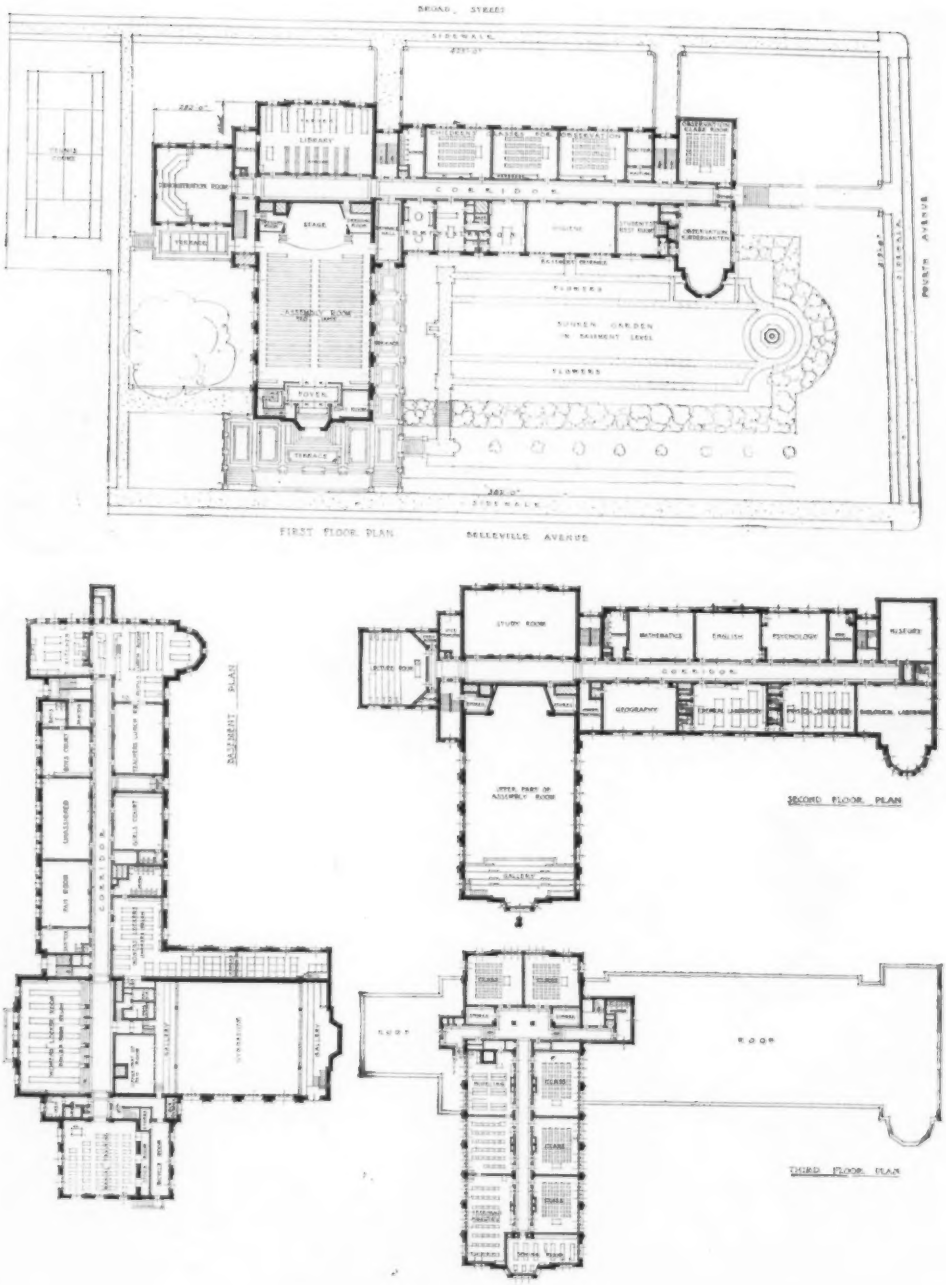
MANY things have combined to make the school house one of the most complicated of modern architectural problems. Not only are the usual appointments changed extensively from year to year, but the growing tendency to devote the school to the broader educational uses and to various sorts of social betterment and neighborhood work has also brought special problems; and each new use, whether educational or sociological, puts before the architect intricate questions of design to solve.

The multiplication of specialized uses, and of the consequent "specialized problems," has led to the development of specialized architectural firms, made up of men who have studied the school house problem from all its angles and who concern themselves more or less exclusively with school house design. Among these specialists there are, perhaps, few whose work, extending over a period of years, has maintained the high degree of excellence, both in planning and in exterior design—this latter especially—that is noticeable in the work of Messrs. Guilbert & Betelle, of Newark, New Jersey.

The importance of efficiency in plan, of providing a building that can be used for many purposes, both educational and social, and many of them at the same time if necessary, without these different uses interfering with one another; of good circulation, centralized administration and safety from fire and panic, combined with economy of maintenance and first cost, are features, besides the equally perplexing ones of the arrangement of the class rooms themselves, not to be overlooked and problems not to be underrated. Neither, in a modern school, are the idealities to be lost sight of, and for these manifold reasons, besides the fact that they are new, and that each was an attempt at ideal planning, the schools of the firm under consideration are well worth studying.

As an example, the Newark Normal School should be given first place because of its successfully designed exterior, as well as for its exceptional arrangement and size. The accompanying plans show the layout of the various rooms. Unusual features are the comparative isolation of the auditorium, an elaborately planned kindergarten "for observation" (this being, as you remember, a normal school), a number of class rooms that are also intended for observation, and a nicely decorated, though rather unfortunately furnished, rest room. In justice to the architects it should be immediately added that they had nothing to do with the selection of this furniture. In the kindergarten an ingle nook with a fire place is provided. Conflicting sources of light, in spite of the prominence given to the bay window in elevation, have been obviated by the use, in the bay, of small oval windows. On this floor there is also a doctor's room.

In the basement are a gymnasium, a manual training room and separate lunch rooms for pupils and teachers. Between the girls' court and the teachers' lunch room is the entrance to the formal garden shown on the first floor plan and, in an undeveloped state, in the accompanying views. While perhaps not the largest, this is without doubt one of the finest of recent normal schools; and in its general design and notably in the arrangement of the auditorium it shows not only a marked ingenuity, but an equally marked degree of courage in so wide a departure from "the usual thing."



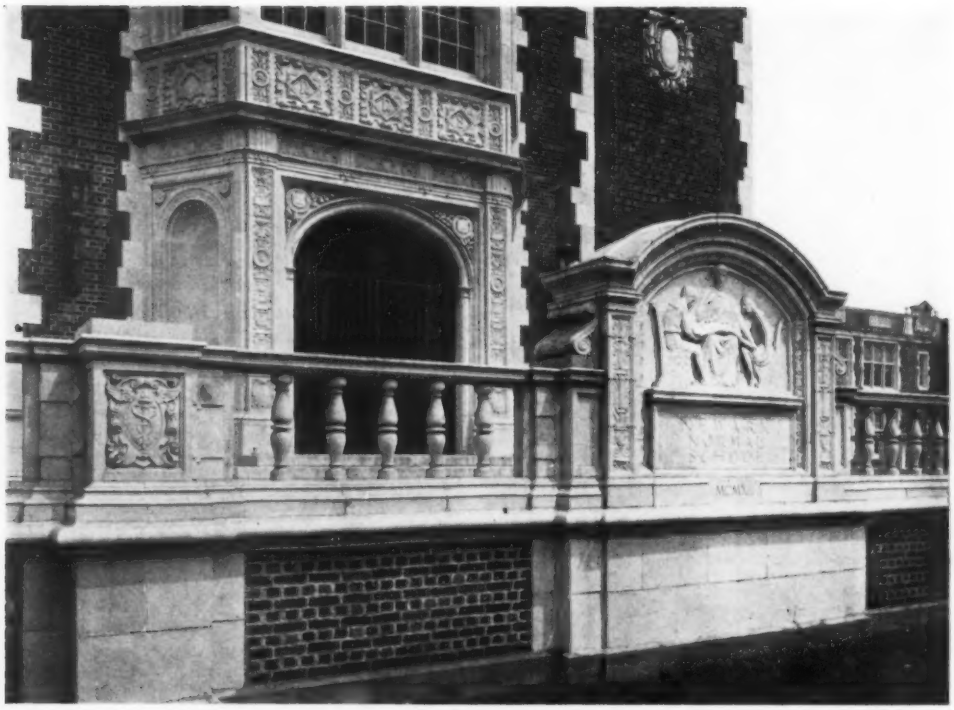
PLANS OF THE NEWARK NORMAL SCHOOL. E. F. GUILBERT, ARCHITECT.

GENERAL VIEW OF THE NEWARK NORMAL SCHOOL.
E. F. Guilbert, Architect.

The Ridge School is even more interesting from the point of view of exterior design. Here the problem was an entirely different one, and the solution bears witness to the changed requirements and to a distinct change in surroundings. Being in a high class residential district, it was thought desirable to make the building attractive to an unusual degree, but without additional expense in erection. On the first floor are five class rooms, an auditorium, kindergarten, the administration offices and a library. A rather unusual feature in an elementary school are the toilets on each floor. The best practice, excepting in high schools, is to confine these entirely to the basement, adjoining the courts or play rooms. Toilets distributed as these are, are used as emergency toilets and are closed during recesses. The arrangement of the auditorium, in its relation to the administration and to the stairs and exits is noteworthy. Used after school hours, the entrance, being directly opposite the main entrance of the building, could be effectively closed off by a temporary railing or screen from the corridors and stairs. On the second floor are the usual class rooms and in the basement a gymnasium under the auditorium, a cooking and a manual training room, besides the courts and the heating and ventilating apparatus.

The Washington School at East Orange is another example of an elementary school at its very best. Here, the auditorium is on the second floor, and the space on the first floor that is usually occupied by it is given to the kindergarten and the administrative offices. The exit from the auditorium is at either side of the room near a stair that leads immediately to the yard.

The arrangement of the kindergarten on the first floor of this school is unusual and in a sense ideal, inasmuch as it has direct access to the main entrance, and the exit can therefore be separated from the exits from the main school. This is an important feature, for it is usually found that when the kindergarten children use the same exits as those used by the older pupils, confusion results; even in the best managed schools, if the small children do not leave the building earlier than the others, various sorts of petty tyranny are assumed by the larger towards the smaller children. For this reason it is advisable to

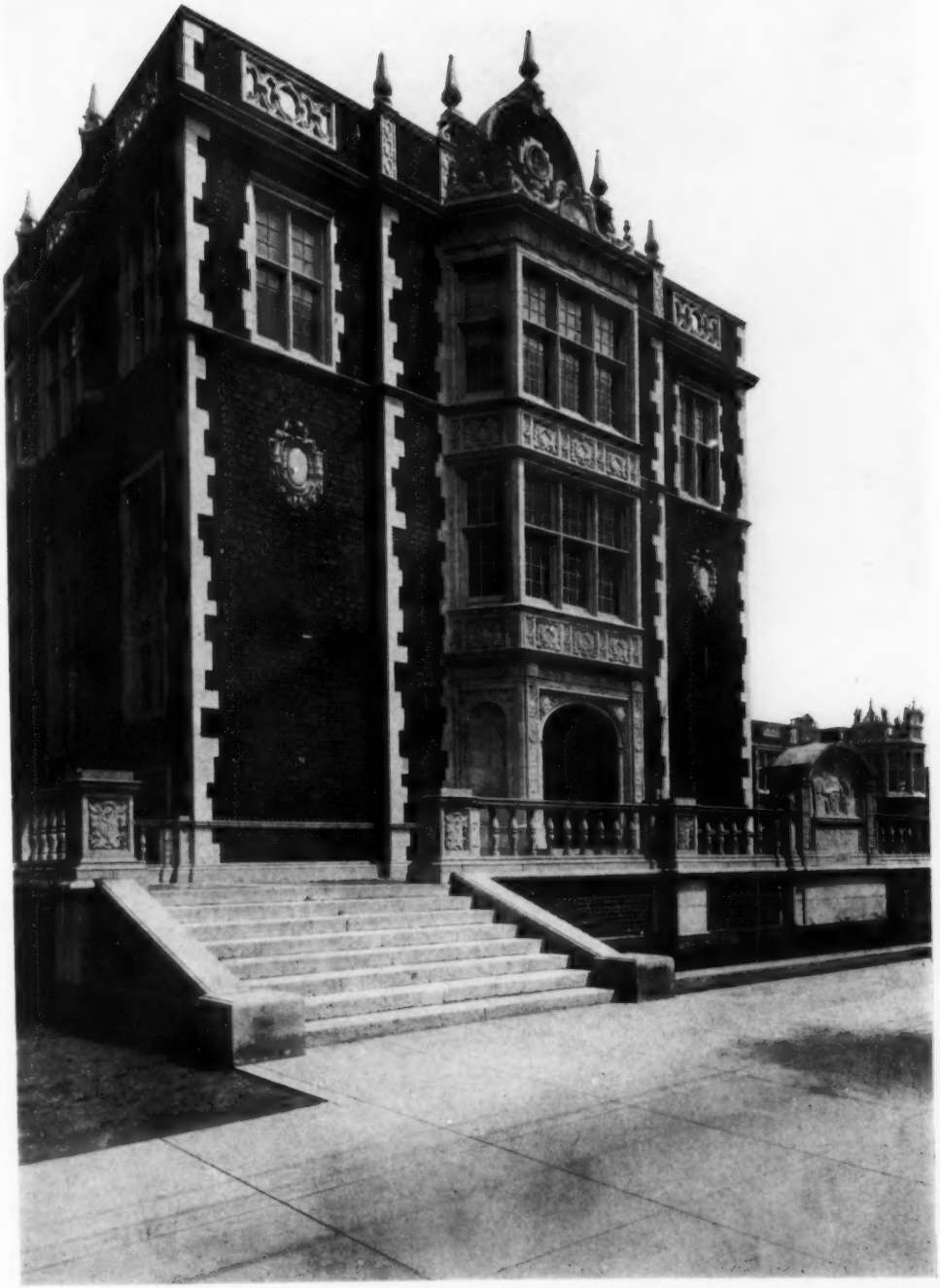


DETAIL OF AUDITORIUM BAY—NEWARK NORMAL SCHOOL.
E. F. Guilbert, Architect.

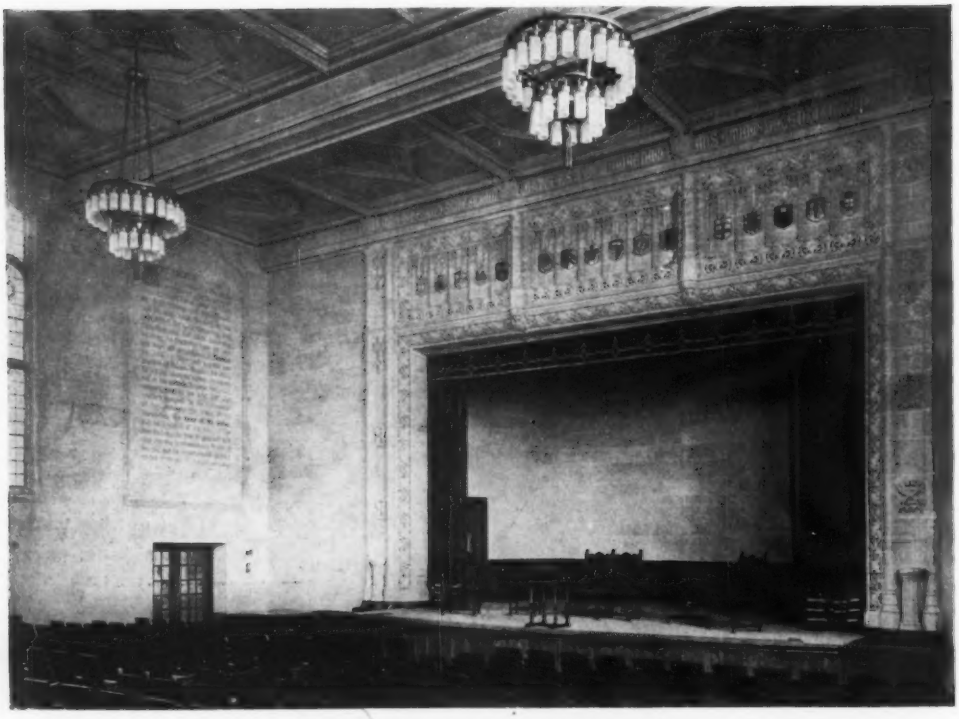
place the kindergarten near some exit that is not used by the other children, or to give it an exit of its own.

On either side of the fireplace there are glass cabinets running from the floor to the mantel shelf and these are used for exhibiting the school's own local masterpieces of kindergarten achievement. In the window recesses, window seats are provided, and this, with the other decorations, give the room a decidedly homelike rather than school-like appearance. The room has its own toilet, equipped with a basin and a tiny drinking fountain.

It will be noted that in all the schools illustrated especial thought has been given to the arrangement of the kindergarten. The perspective view of an exterior garden or play yard is for one to be used in connection with the kindergarten in the new Lafayette School in Newark. The plan which accompanies it, however, is really for no actual school at all. It is simply an ideal plan, showing the necessary fixtures and their best arrangement, all in a way which Guilbert & Betelle, as specialists in that sort of thing, hope before long to put into actual practice. There is also illustrated a school room plan in which everything necessary is shown and in which the arrangement was not left to chance. This room is 22 feet wide and 30 feet long, exclusive of the wardrobe. Most of the class rooms shown vary from this size to 25 feet by 32 feet. Any room larger than this is found unsatisfactory. The size of desks, width of aisles, etc., are figured. The blackboards are at the front and on one side only. The wardrobes are at the rear of the room rather than at front or sides, to obviate the confusion and inconvenience on the part of the pupils of turning completely around in their seats to see a board at the rear. Unilateral lighting here, as in every modern school, is advocated. The Washing-



AUDITORIUM BAY—NEWARK NORMAL SCHOOL. E. F. GUILBERT, ARCHITECT.



AUDITORIUM—NEWARK NORMAL SCHOOL.
E. F. Guilbert, Architect.

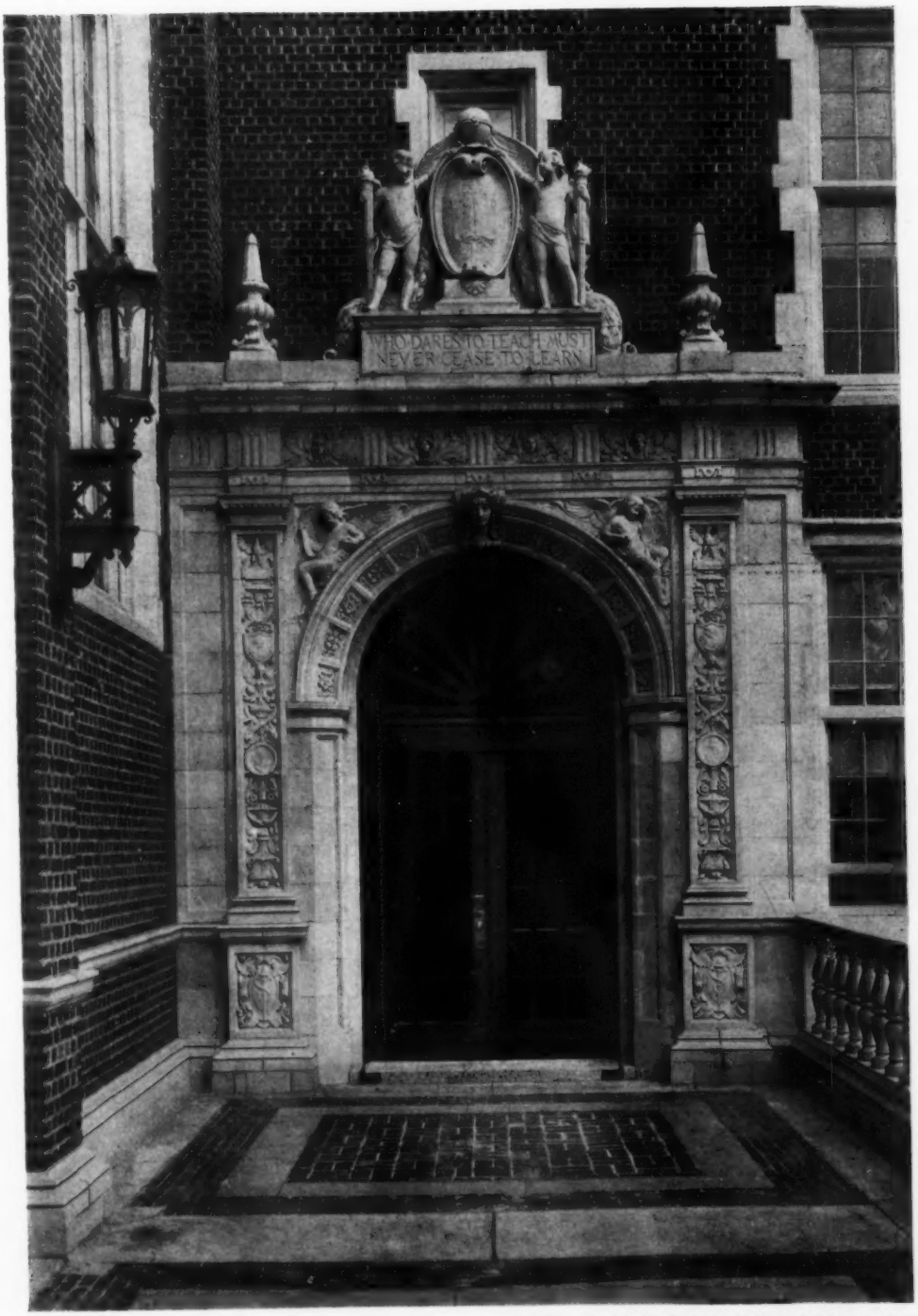
ton School provides for large future extensions at the rear.

The color scheme is interesting. The walls are of a rough, irregular toned red brick, laid in white mortar with wide joints. The trimmings are of gray terra-cotta, and the overhanging eaves contain rafters rather brilliantly colored—as are also the soffit panels—in green, orange and brown. The windows are white and the entrance doors are brown.

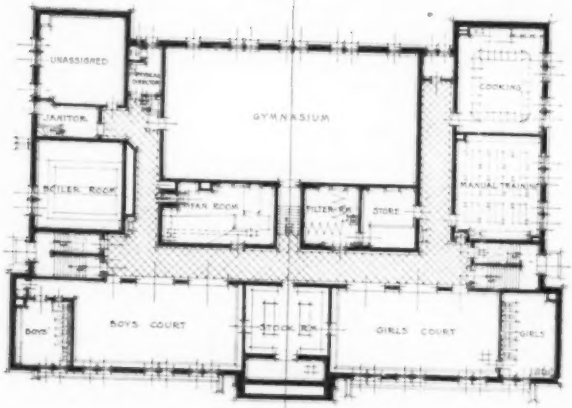
Owing to the success of this building, and of others like it, Messrs. Guilbert & Betelle have, quite naturally, been appointed by the Board of Education of East Orange, where the Washington School is built, to design and construct all future schools erected there. Owing to the fact that Mr. E. F. Guilbert is the architect for the Newark school board, the firm—or at least Mr. Guilbert—also has complete charge of the design of all Newark schools. Besides this Guilbert & Betelle are doing all of the school work at the present time in Bayonne, New Jersey, and in Greenwich, Conn.

Of the work in Newark the *School Board Journal* says:

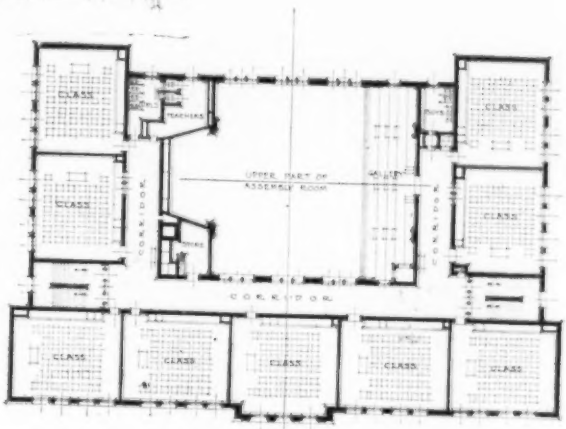
"The building activities of the Newark board of education during the past four years have been extraordinary when the size of the city is taken in consideration. Nineteen new buildings and additions have been undertaken, providing for nearly fifteen thousand pupils, in approximately four hundred class rooms. Included in the nineteen buildings are thirteen auditoriums and as many gymnasiums, which serve not only for the children enrolled in the respective buildings, but are also open for evening use. The total cost of these buildings is slightly less than $2,700,000, in itself a great sum of money, but not so large when the amount of accommodations provided with it is taken into consideration. For Newark is erecting high and elementary



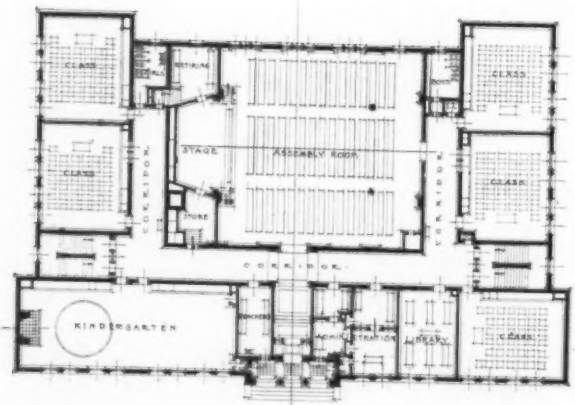
DETAIL OF MAIN ENTRANCE—NEWARK NORMAL SCHOOL. E. F. GUILBERT, ARCHITECT.



– BASEMENT PLAN –

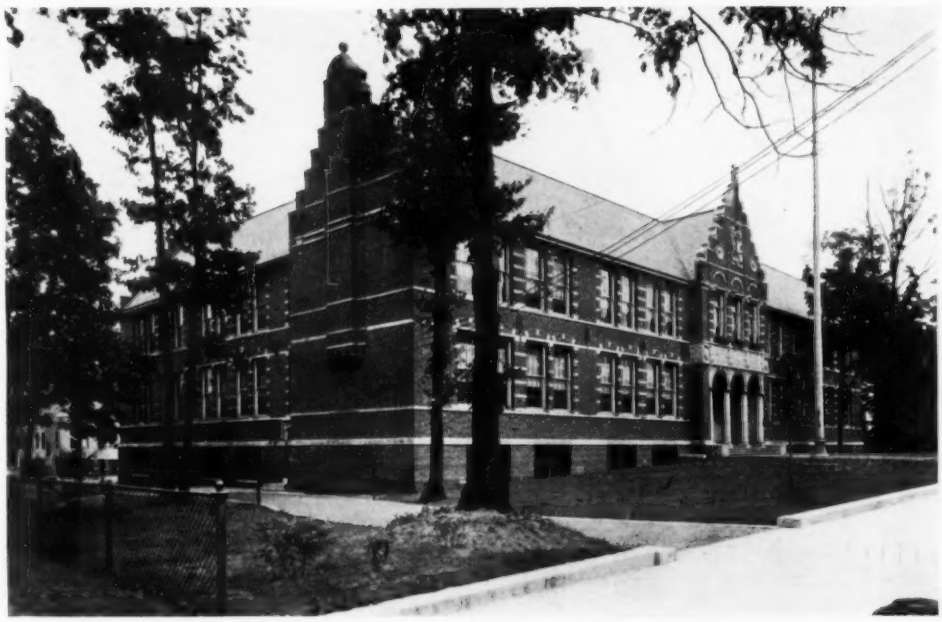


– SECOND FLOOR PLAN –



– FIRST FLOOR PLAN –

PLANS OF THE RIDGE SCHOOL, NEWARK, N. J. E. F. GUILBERT, ARCHITECT.



EXTERIOR OF THE RIDGE SCHOOL, NEWARK, N. J.
E. F. Guilbert, Architect.

schools at a general average cost of $180 per child. This record is very creditable when the cost in such neighborhood centers as Boston, New York and Philadelphia, which have similar labor and material markets, is considered.

"The entire work of planning and supervising the construction of all these buildings has been ably handled by the construction department of the board, under the direction of Mr. Ernest F. Guilbert, architect. Associated with Mr. Guilbert has been Mr. George W. Knight, the school engineer, who has designed and supervised the heating, lighting, ventilating and other engineering details.

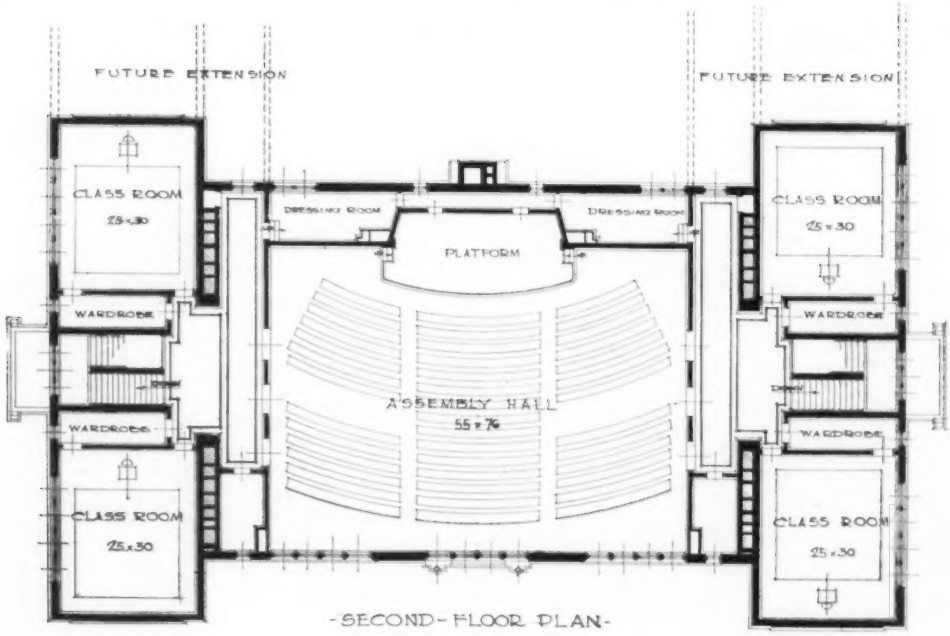
"Of the nineteen new schools and additions, the most important building which has been undertaken is the Central Commercial and Manual Training High School. The school has a capacity of 1,200 pupils and is fully equipped for complete college preparatory, English, science and vocational courses.

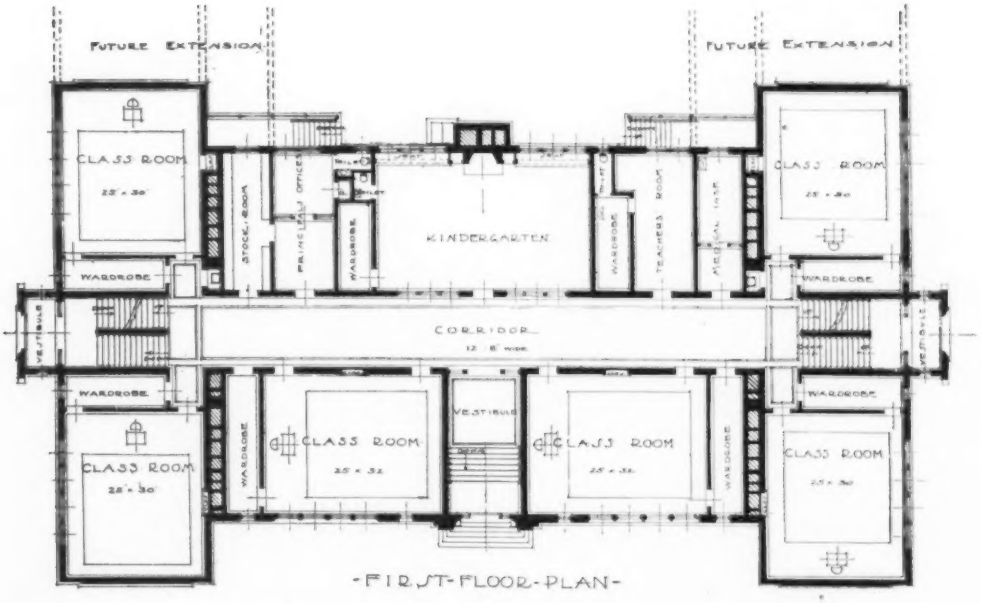
"The exterior is a pleasing adaptation of Collegiate Gothic in brick, cut stone and terra-cotta. The most striking feature is the arrangement of the great terrace and outside stairways, leading to the main entrance of the building. The architect has here made the best possible use of a sloping site, not only for utility, but also for architectural beauty.

"The basement, which is largely above the level of the surrounding site, is devoted to locker rooms, foundry and forge rooms, stock rooms and space for the heating and ventilating apparatus. A large gymnasium is located below the terrace, outside the main structure. This portion of the building also contains the boiler and engine rooms and space for a mechanical testing plant.

"The first floor contains a machine shop one hundred feet long, three class rooms, a large reference library, administrative offices, a pattern shop, a sheet-metal working shop and space for wood-turning, joinery, masonry and wood-finishing. The auditorium, which has a seating capacity of more than 1,000 persons, is also located on the first floor.

"On the second floor are five standard class rooms, three rooms for business practice and typewriting, two chemical





PLANS OF THE WASHINGTON SCHOOL, EAST ORANGE, N. J.
Guilbert & Betelle, Architects.

EXTERIOR OF THE WASHINGTON SCHOOL, EAST ORANGE, N. J.
Guilbert & Betelle, Architects

laboratories separated by a lecture room, two sewing rooms, two millinery rooms, a room for dressmaking and a large study hall. The gallery of the assembly room is entered from the level of the second floor.

"The third floor contains eight standard class rooms, a music room, a biological laboratory, two kitchens, a laundry, a great machine drawing room, a freehand drawing room, two physics laboratories and a lecture room.

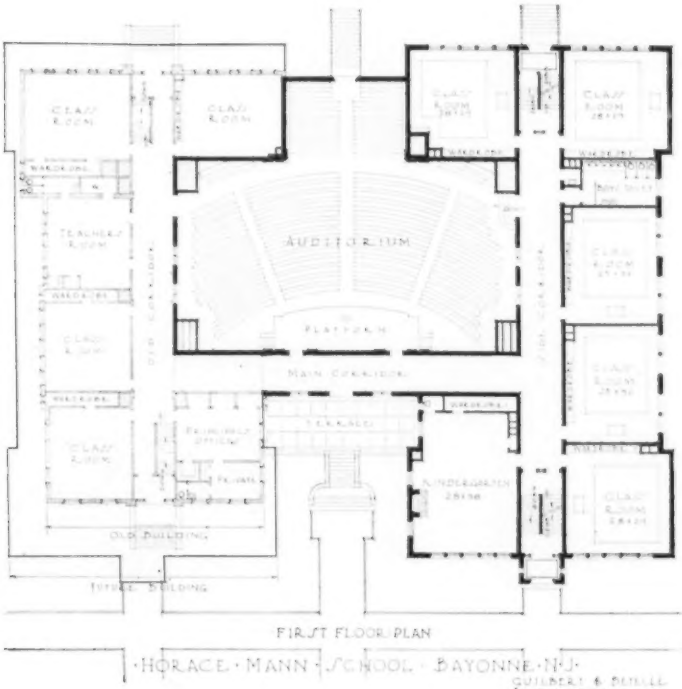
"The fourth floor is largely unfinished and will not be completed until the enrollment of the school demands additional classroom space. It contains at present only two lunch rooms, with a large kitchen between them, and a music room.

"The main portion of the building is square in shape with class rooms surrounding corridors on all four sides. Four sets of stairways are provided and three elevators have been installed."

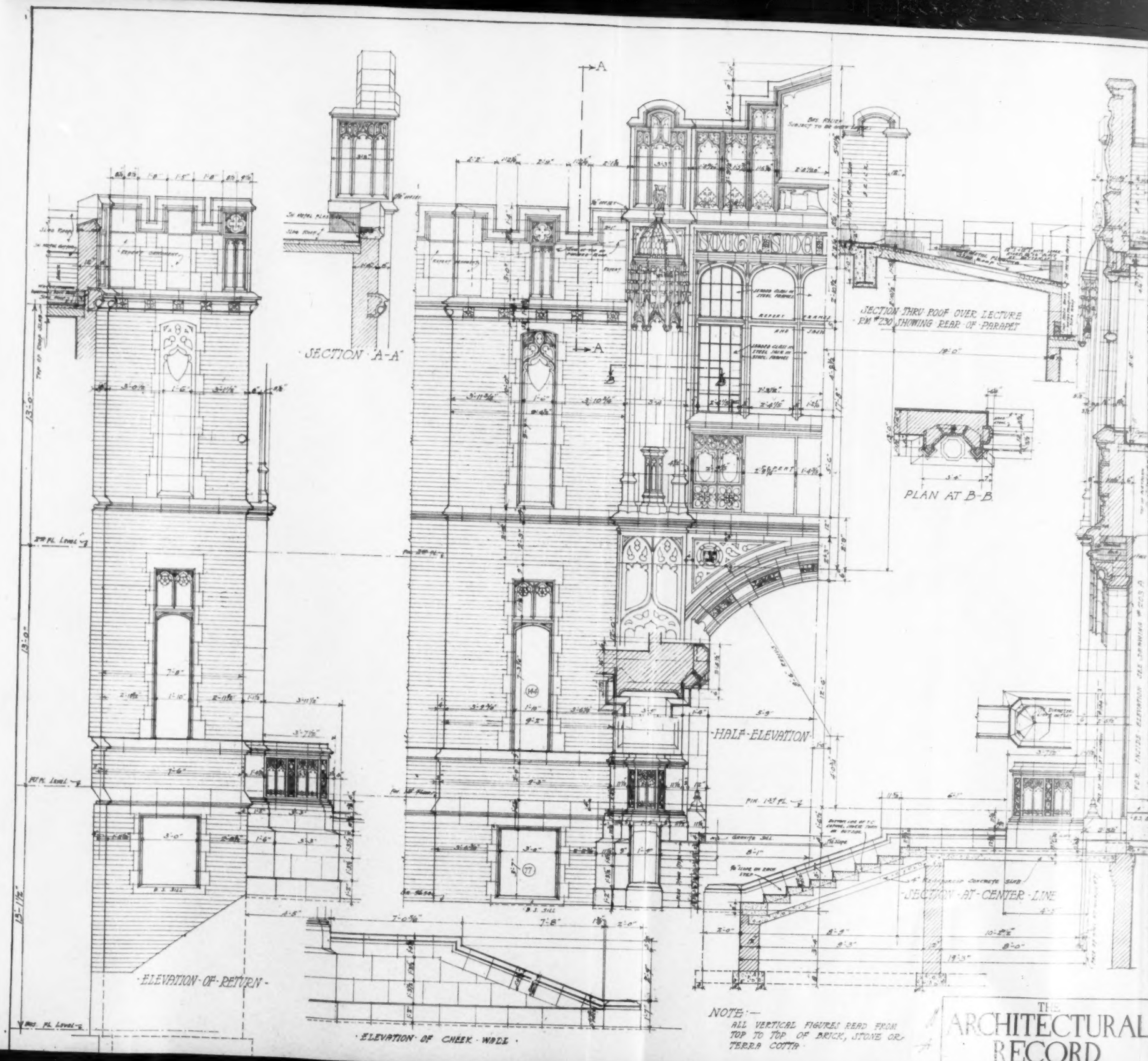
To this it may be added that the music room is a feature worthy of reproduction in other large schools. In this case the room is an excellent model for reproduction. The acoustics are excellent. The auditorium is in the center of the building and is lighted by skylights in its ceiling.

Other buildings by the firm that may be mentioned, and some of which are represented here either by plans or exterior views, are the $250,000 East Side Commercial and Manual Training High School, similar in plan to the "Central High" but somewhat smaller; the Montgomery School, in which the unusual feature is an open air class room on the top story, of which an interior view is given, and a large playground on the roof. In this building are twenty-three class rooms and an auditorium to seat 875. The Webster Street School has sixteen class rooms, a gymnasium and an auditorium to seat 540. It is planned to make it double this size in the near future when the old building is razed.

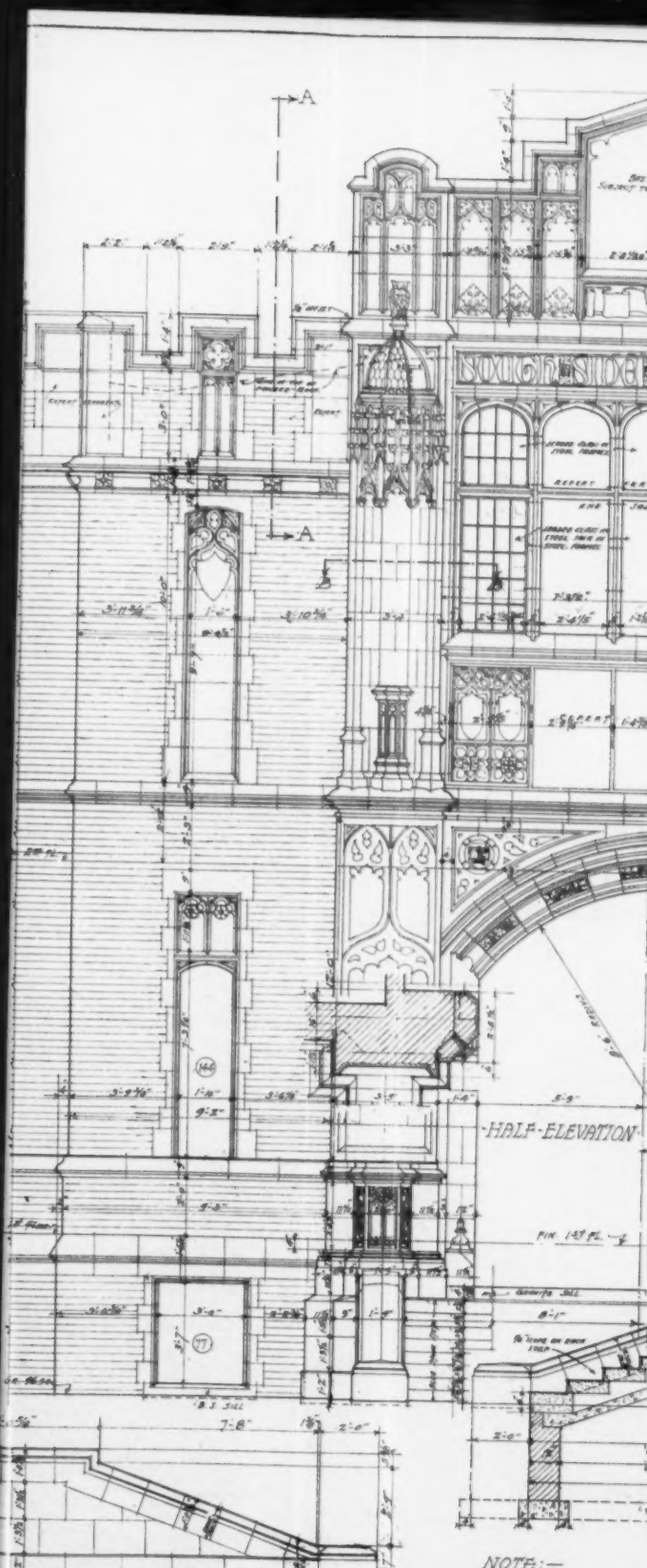
The East Orange High School presented an unusual problem because of the fact that it was desirable to retain and use the old high school in connection with the new one. The elevation shown is that of the new building. The



PLANS OF THE HORACE MANN SCHOOL, BAYONNE, N. J. GUILBERT & BETELLE, ARCHITECTS.


SECTION A-A
SECTION THRU ROOF OVER LECTURE RM. #230 SHOWING REAR OF PARAPET
PLAN AT B-B
HALF ELEVATION
SECTION AT CENTER LINE
ELEVATION OF RETURN
ELEVATION OF CHEEK WALL
NOTE:—
ALL VERTICAL FIGURES READ FROM TOP TO TOP OF BRICK, STONE OR TERRA COTTA

THE ARCHITECTURAL RECORD
Detail Plate No. 39


A
A
HALF-ELEVATION
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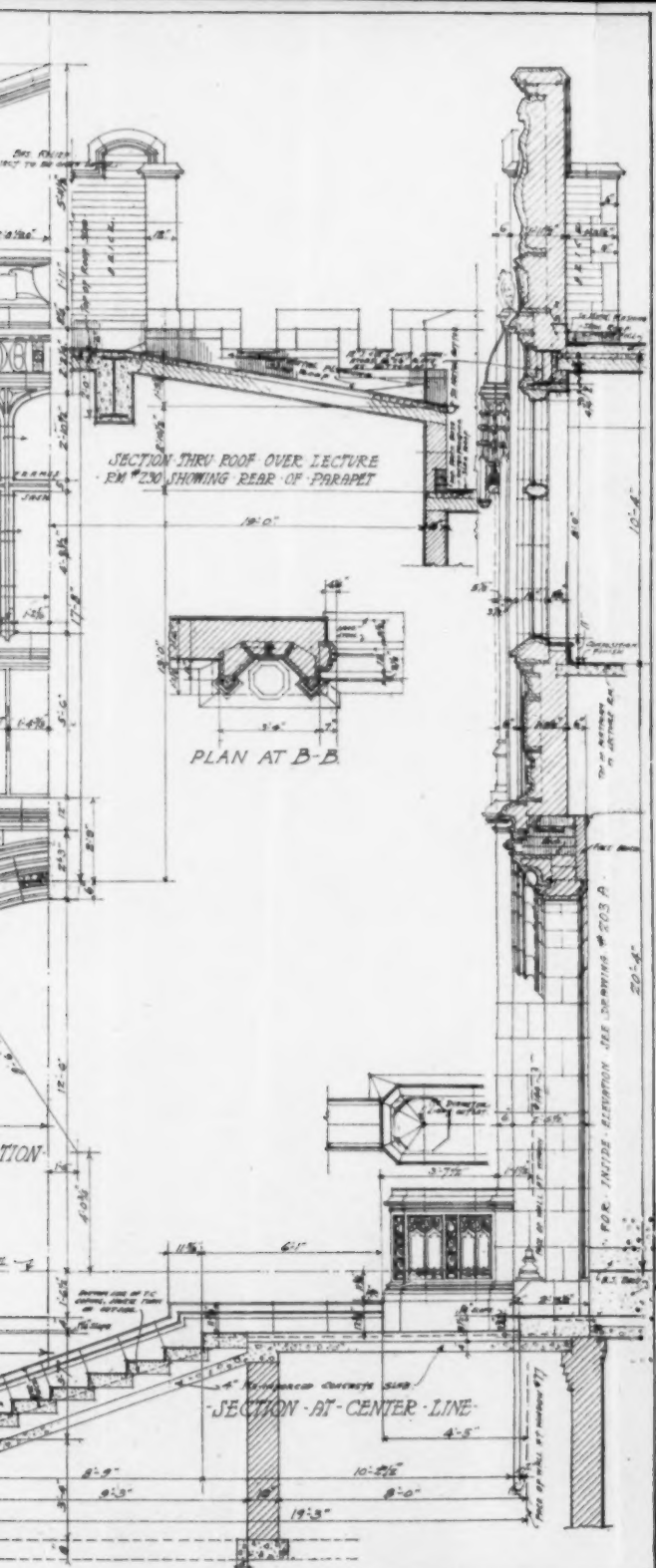
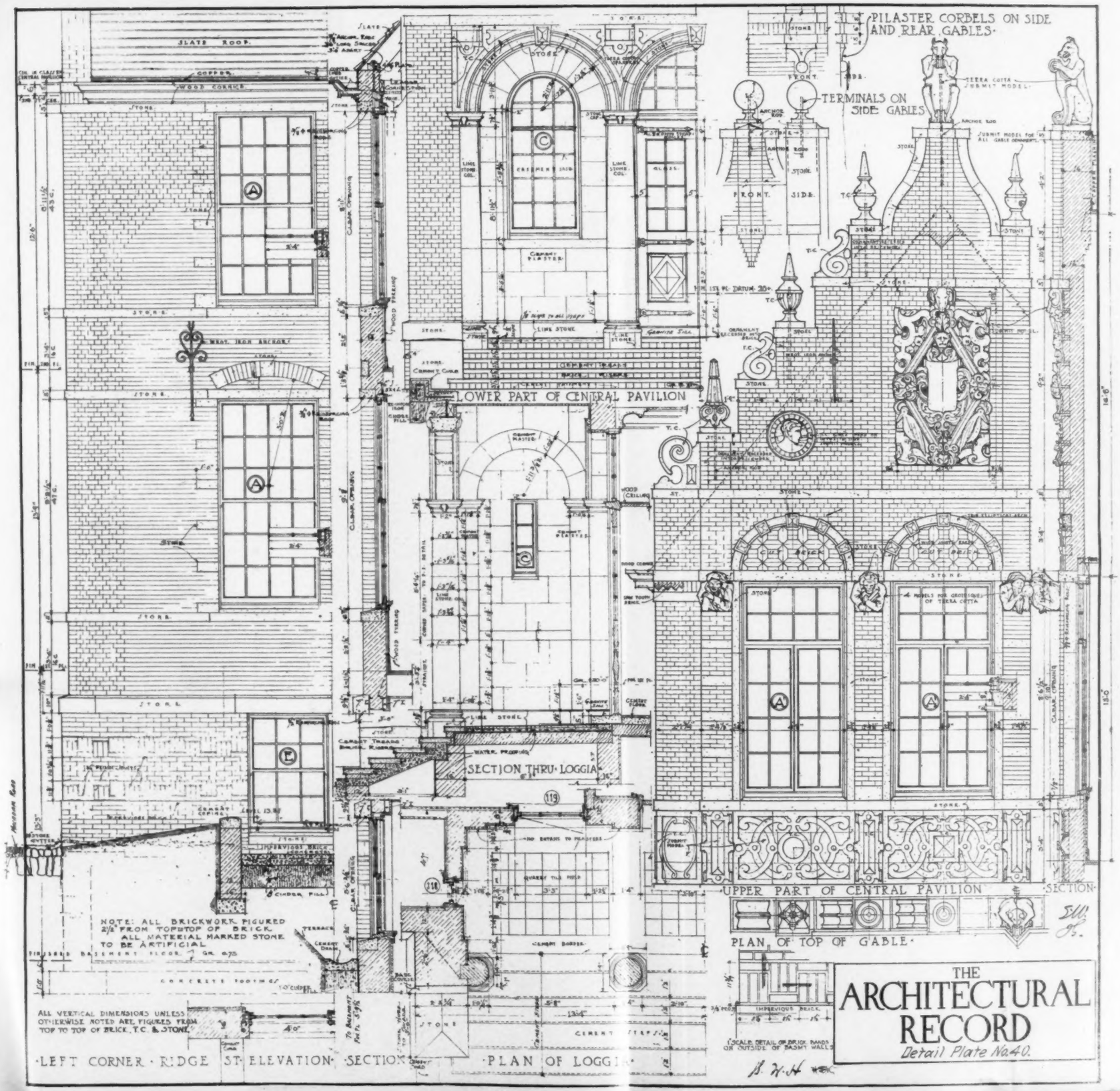
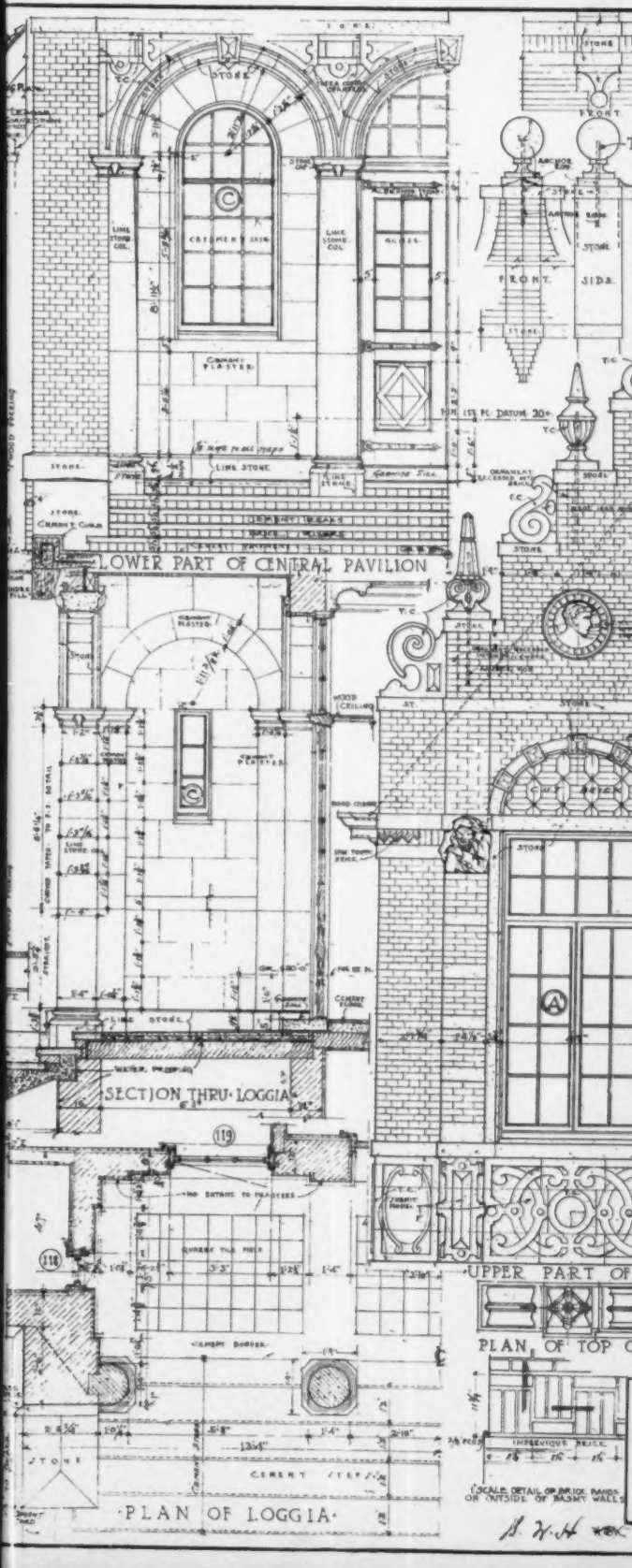
TION OF CHEEK WALL

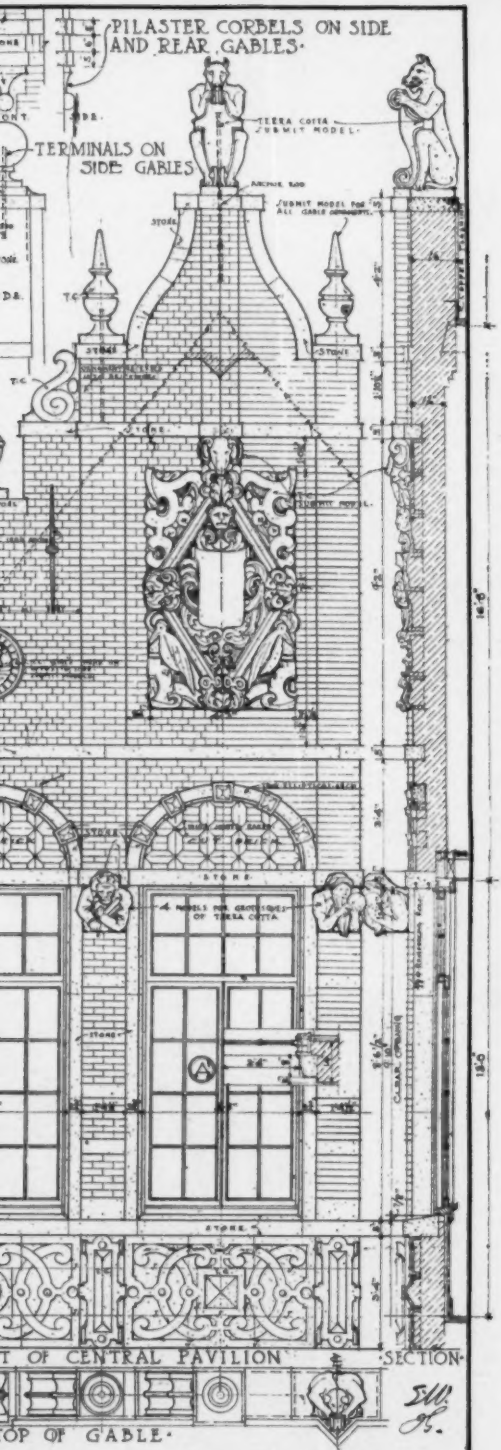

SECTION THRU ROOF OVER LECTURE RM #230 SHOWING REAR OF PARAPET
PLAN AT B-B
FOR INSIDE ELEVATION SEE DRAWING #203 A
SECTION AT CENTER LINE

ICAL FIGURES READ FROM
OP OF BRICK, STONE OR
COTTA

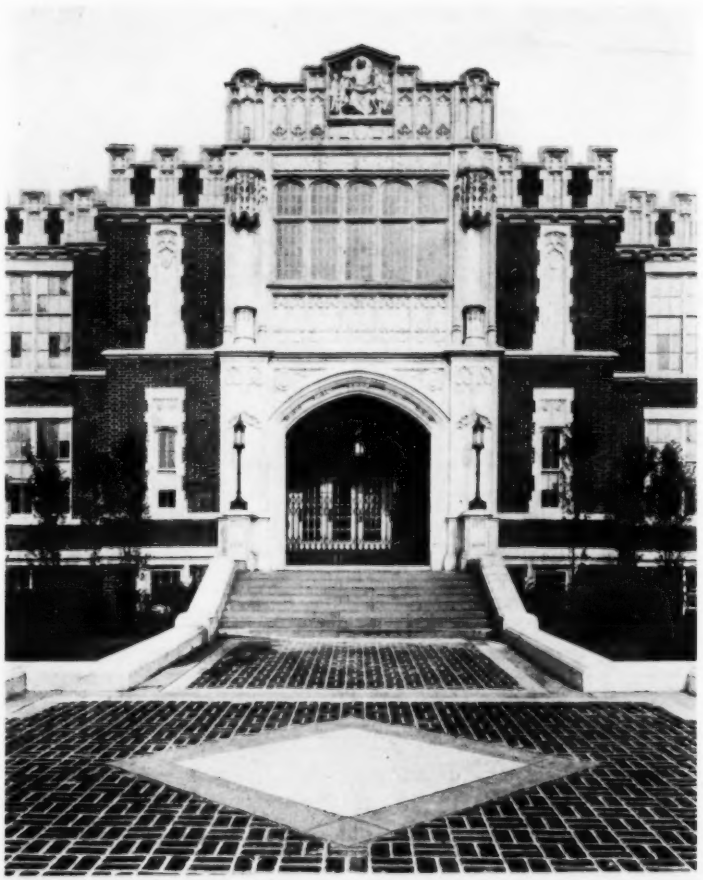
THE
ARCHITECTURAL
RECORD
Detail Plate No. 39


PILASTER CORBELS ON SIDE AND REAR GABLES.
TERMINALS ON SIDE GABLES
LOWER PART OF CENTRAL PAVILION
SECTION THRU LOGGIA
UPPER PART OF CENTRAL PAVILION
SECTION
PLAN OF TOP OF GABLE
NOTE: ALL BRICKWORK FIGURED 2 1/2" FROM TOP TO TOP OF BRICK. ALL MATERIAL MARKED STONE TO BE ARTIFICIAL
ALL VERTICAL DIMENSIONS UNLESS OTHERWISE NOTED ARE FIGURES FROM TOP TO TOP OF BRICK, T.C. & STONE.
LEFT CORNER · RIDGE ST ELEVATION · SECTION
PLAN OF LOGGIA
THE ARCHITECTURAL RECORD
Detail Plate No. 40.


LOWER PART OF CENTRAL PAVILION
SECTION THRU LOGGIA
PLAN OF LOGGIA
UPPER PART OF
PLAN OF TOP
FRONT
SIDE
STONE
CEMENT PLASTER
LIME STONE
CEMENT STEPS
IMPERVIOUS BRICK
WOOD CEILING
CEMENT MORTAR
CEMENT BORDER
QUARRY TILE FLOOR
WATER PROOFING
119
118

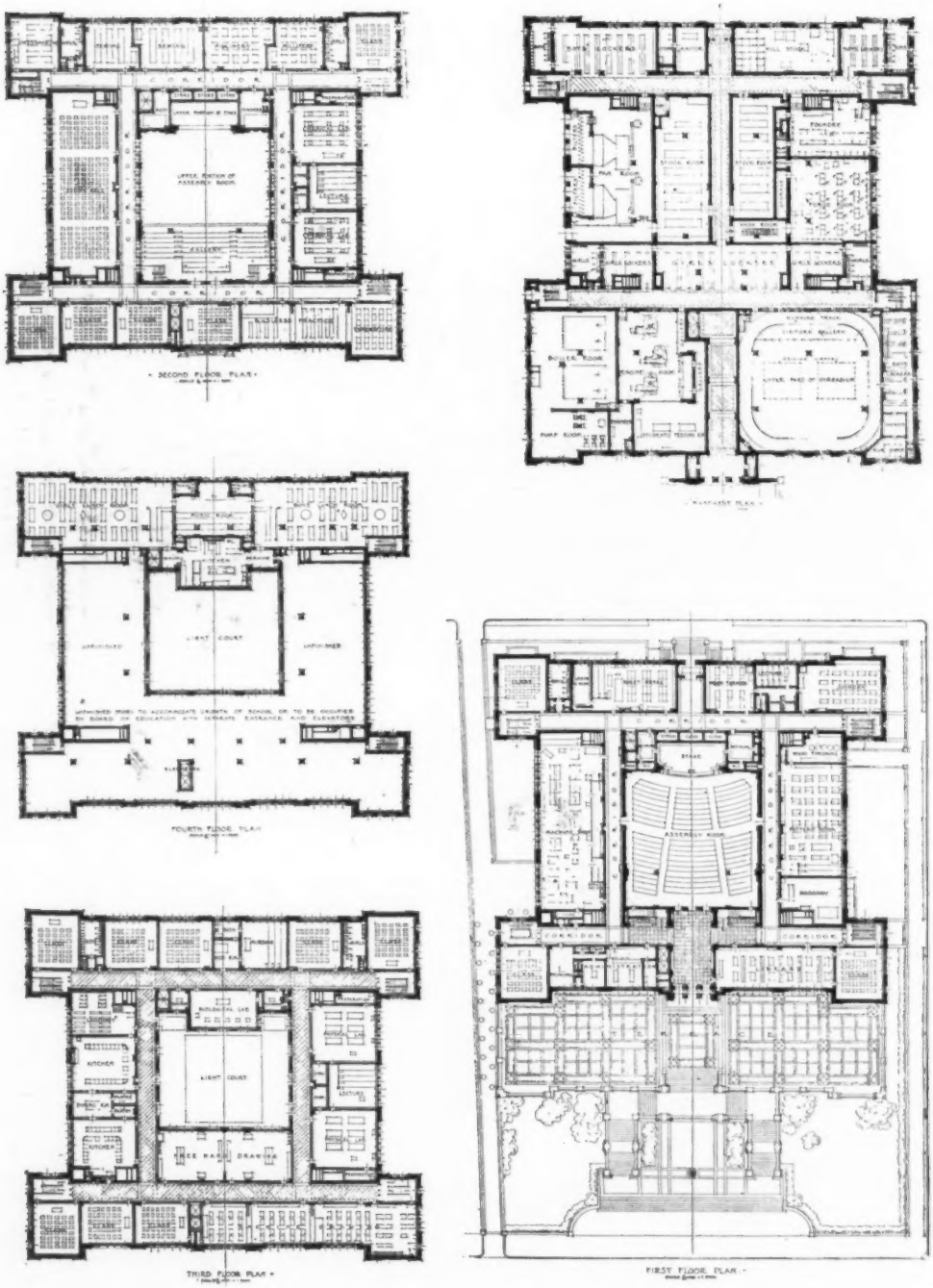


THE
ARCHITECTURAL RECORD
Detail Plate No. 40.



SOUTH SIDE HIGH SCHOOL, NEWARK, N. J.
E. F. Guilbert, Architect.

DETAIL OF CENTRAL BAY—EAST ORANGE HIGH SCHOOL.
Guilbert & Betelle, Architects.



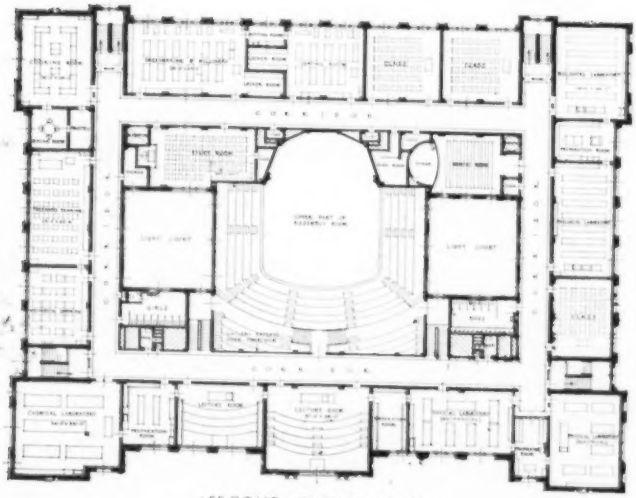
PLANS OF THE CENTRAL COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J. E. F. GUILBERT, ARCHITECT.

GENERAL VIEW OF THE CENTRAL COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.
E. F. Guilbert, Architect.

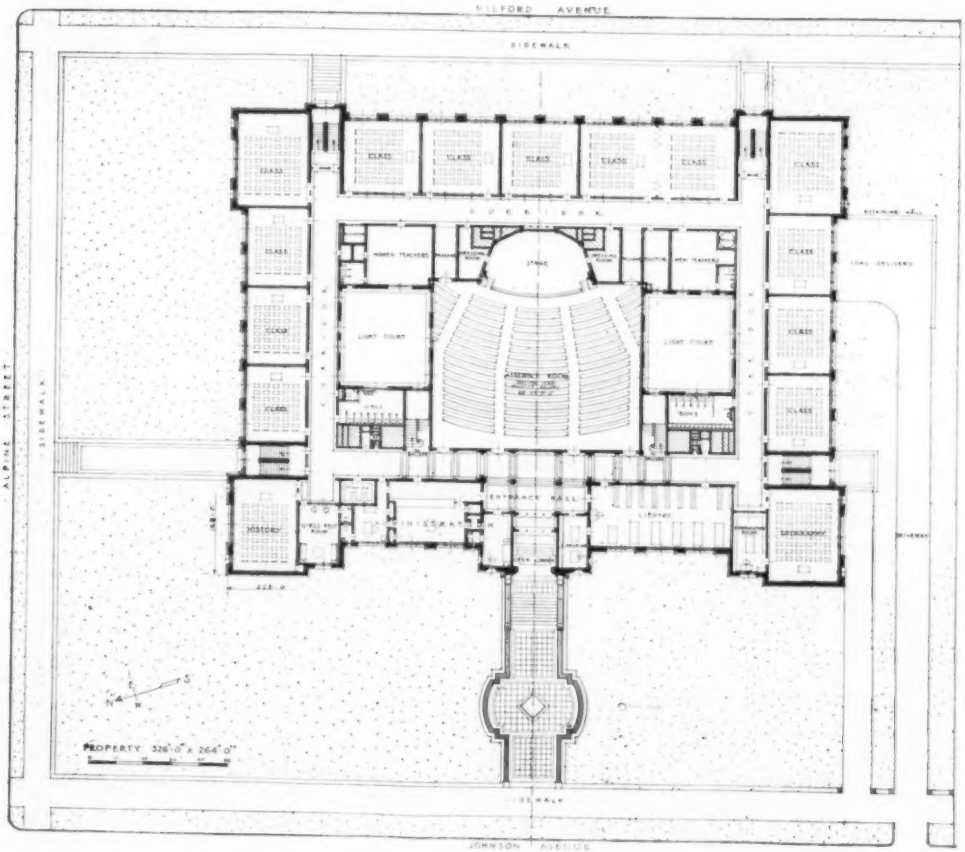
old and new buildings face different streets and they are connected by a row of class rooms on the first floor and by an open air gymnasium or class room on the second. The old building is used for administrative purposes and for various social rooms—including some men teachers' club rooms, while the new one is devoted entirely to class and study rooms, etc. In speaking of this work, in its connection with exterior design, I may add that the Guilbert & Betelle elevations are of especial interest as illustrating an important feature of American architecture. The plants of this firm show a degree of skill and knowledge of school house problems that is not often met with and their schools have established precedents that will naturally be followed by other designers.

But the elevations of their buildings have an interest and a wider significance than any plan could have, and even when the great importance of planning is taken into consideration the fact still remains that these elevations are of interest to every architect in or out of "school house lines." One might call them, and they would be called as a rule, "Collegiate Gothic." And Collegiate Gothic is used in school house work, among other reasons, because it adapts itself in a consistent way to the large window openings and small piers that are necessary to successful school house design. And yet these buildings that Guilbert & Betelle have designed are not, one is glad to say, strictly, or archæologically, English Collegiate. Neither is the Gothic strictly French, English or Italian Gothic.

Looking, for instance, at the exterior of the Central Commercial and Manual Training High School, which title is familiarly shortened to "Central High" in actual use, you will notice that after all it is really not Collegiate Gothic at all. There are circular headed window openings on the top floor with Renaissance pilasters between. The terrace entrance is distinctly Renaissance and the heads



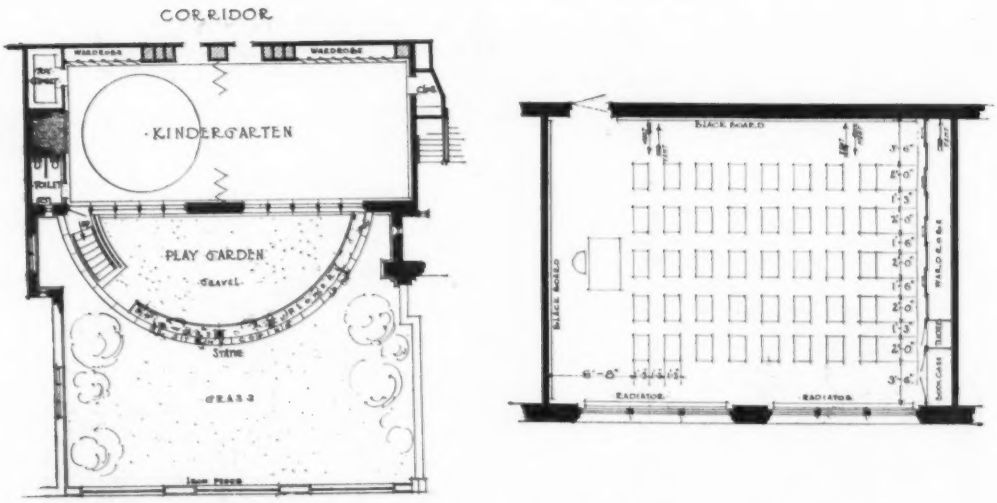
SECOND FLOOR PLAN.



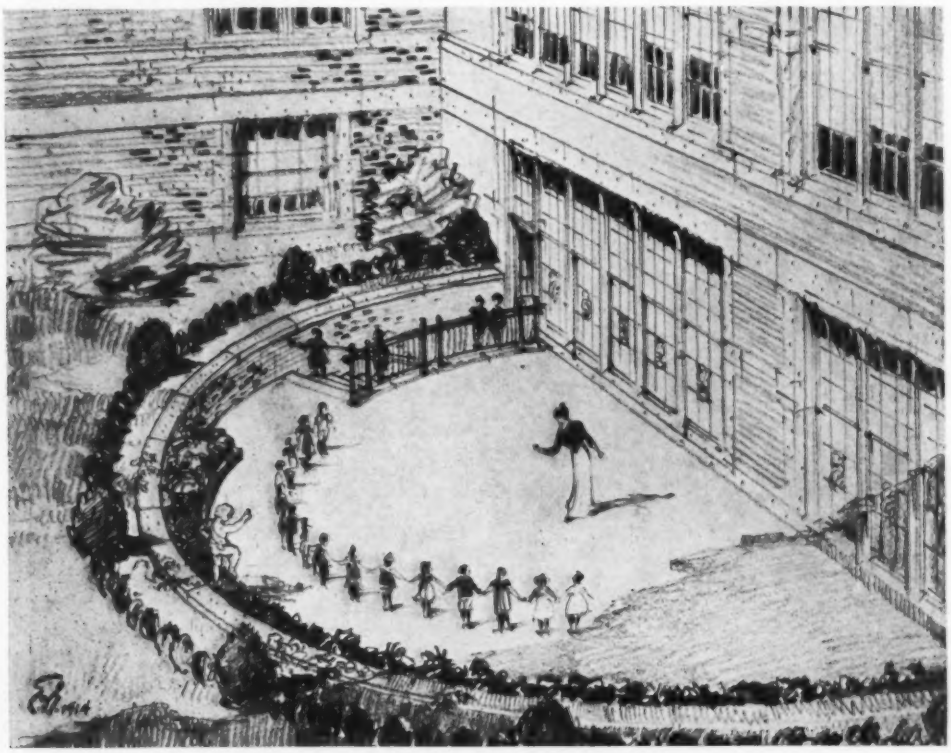
PLANS OF THE SOUTH SIDE HIGH SCHOOL, NEWARK, N. J. E. F. GUILBERT, ARCHITECT.

MONTGOMERY SCHOOL, NEWARK, N. J.
E. F. Guilbert, Architect.

EXTERIOR OF THE SOUTH SIDE HIGH SCHOOL.
E. F. Guilbert, Architect.



PLANS OF AN IDEAL CLASS ROOM AND KINDERGARTEN.
Guilbert & Betelle, Architects.



PERSPECTIVE VIEW OF AN IDEAL KINDERGARTEN PLAYGROUND.
Guilbert & Betelle, Architects.

INTERIOR OF TYPICAL OPEN AIR CLASS ROOM.
Guilbert & Betelle, Architects.

of the basement windows are arched in a distinctly modern un-Gothic way.

What does this mean? And is any especial meaning attached to the fact that you go through a carefully studied and altogether successful doorway that is "distinctly Renaissance" in the Newark Normal School, into an auditorium that is as successfully designed a "Collegiate Gothic" auditorium as there is in America, without any apparent feeling of the unfitness of going thus suddenly from Renaissance to Gothic and then from Gothic (if you leave by the auditorium entrance) to Renaissance again?

Just what it does suggest will naturally vary according to the person to whom the suggestion comes. To me it suggests a sort of echo of the motto over the Normal School door,

"Who Dares to Teach Must
Never Cease to Learn."

and I like to think that Messrs. Guilbert & Betelle, in their school work—perhaps without being conscious of it—are teaching us or at least showing us how we may learn to look away for a time from a too close dependence upon historic styles and to walk alone for a season into a more nearly American style of architecture.

As one looks at these schools, and at the work of many other contemporary designers, one feels more and more that American buildings are becoming so distinctly Americanized that, even though the designs are based upon historic styles, they would certainly appear out of place in surroundings that are not American. And one would not be apt to mistake these schools for anything but what they are—American public schools.

American architects, having no traditions that might be called national, must look to other countries for their primary inspiration; but, like every good artist, no matter in what material or medium he may work, the Ameircan designer will reach his own national expression by frankly accepting each new problem and by finding in it an inspiration for new solutions and new endeavors.

MONTGOMERY SCHUYLER *and the* HISTORY *of* AMERICAN ARCHITECTURE *by* Edward R. Smith

MODERN civilization may be said to lack quality. Many of the broad and generous convictions which characterized the generations immediately preceding our own have been abandoned, and the rich culture of other days seems to be passing.

Perhaps this lack of quality is creeping into architecture. In the rush of modern competition the architect is more or less at the mercy of the financier, and is yielding pre-eminence to the engineer of construction. He finds it difficult to maintain his standing as a scholar and artist.

The professor of an art so broad as architecture, so fundamental to human society, so necessary to the expression of the larger qualities of human nature, should himself be broad, many-sided and sympathetic.

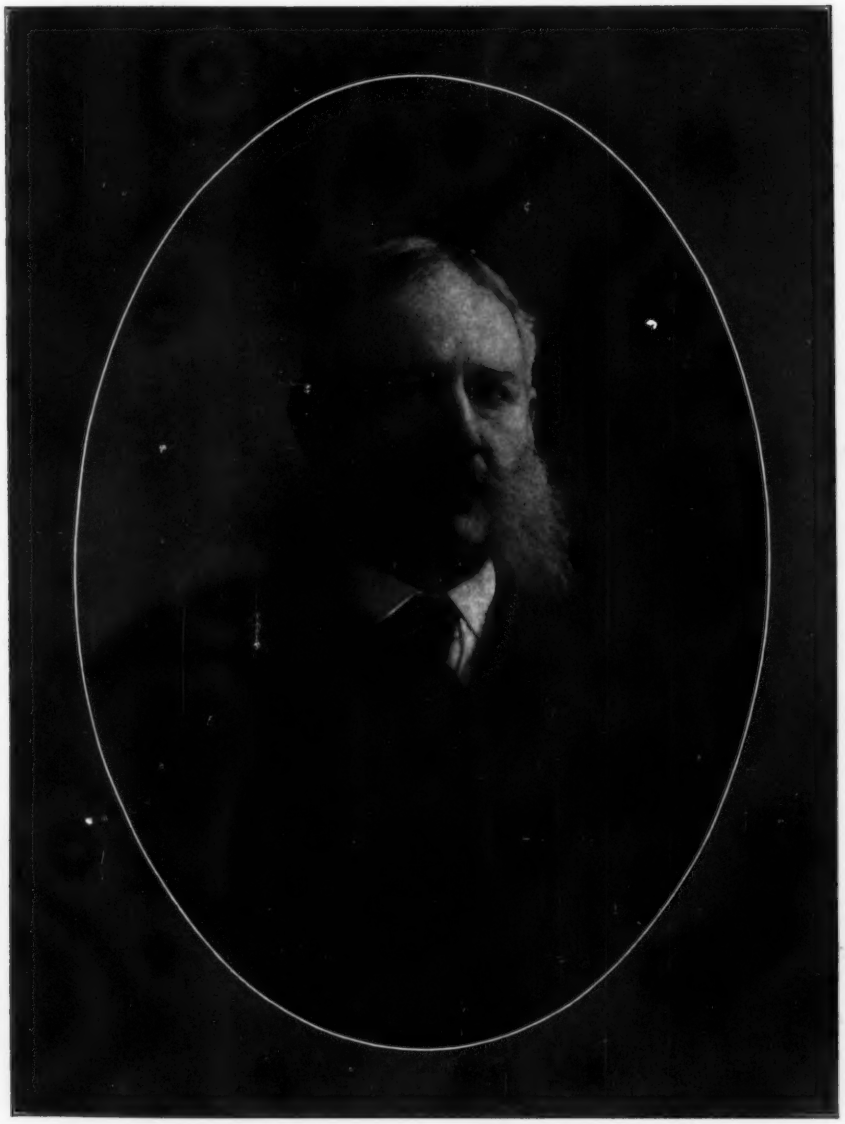
The large and genial atmosphere of the older time has persisted in the personality of several men who are well within the field of our friendly recollection. One of these was Russell Sturgis.

The ARCHITECTURAL RECORD and its readers knew Mr. Sturgis well. He was one of the founders of the magazine, and was always in the background, and often to the fore, in the management of this journal, which has stood especially for scholarship in American architecture.

Sturgis was interested in everything which was interesting; in himself and in his own fine personality, in his home, in his house, in his library, in the astonishing little collections of all beautiful things, which his limited means permitted him to create, in every art, in the policies of city, State and nation, and in all questions of social import. He was a master of English style such as were few in his day and fewer still in ours. His phrase was rich, abundant, full of suggestion and wonderfully vitalizing. He was a good architect, much better than good at times; a master critic of sculpture and painting, and of all the various industries of the beautiful. All this varied knowledge and sentiment were ready at the call of an unusually lucid faculty of recollection.

Such another was Montgomery Schuyler, of the same generation as Sturgis, and intimately associated with him. He had the same large sympathies and the same breadth of knowledge. He had not the same incisive force, but instead a gentle and temperate quality of mind, which is perhaps quite as valuable. He was not a trained architect, as Sturgis was, but by much study and constant association with active men he became sufficiently conversant with detail. Perhaps the lack of more definite equipment made possible the broad and human point of view which he held better than any American writer on architecture.

Montgomery Schuyler was born at Ithaca, New York, August 16, 1843, and died at New Rochelle, July 6, 1914. His father was the Rev. Dr. Anthony Schuyler, of Ithaca. He belonged to the Arent Schuyler branch of this great New York family, which produced several men of much importance in the Colonial and Revolutionary period. He entered Hobart College in 1858, but did not graduate. At the close of the Civil War he came to New York and entered the profession of journalism, serving on the *World* until 1868, when he passed over to the *Times*. From 1885 to 1887 he was Managing Editor of *Harper's Weekly* and afterward served the publishers of that journal as reader until 1894. He retired from the service of the *Times* in 1907. Mr. Schuyler was one of the organizers of the ARCHITECTURAL RECORD in 1891, and his article on the Romanesque Revival in New York was the first contribution pub-



MONTGOMERY SCHUYLER

lished, following immediately Mr. Desmond's introductory note. He had the honor of being the first to enter this periodical, which has depended on him for much of its best matter.

Looking over the bibliography which is printed at the end of this article, it will be noticed that he was interested almost exclusively in the Americana of architecture. Except for the charming story of a trip to Mont Saint-Michel in volume xi (1902), an account of the "Architecture of Mexico City" in volume xxxii (1912), and an article entitled "Les Nouveautés de Paris" in volume x (1900-1901), every article in the list is of American matter.

His writing is not even general in its application to architecture. The apparent exception, an article on the "Art of City Making," which appeared in volume xii of the Record (1902), begins with a broad appreciation of the subject, but soon changes to a fine special treatment of the two great city plans of Washington, by L'Enfant and the Burnham Commission of 1902. Mr. Schuyler's interest in American architecture was broad and deep. It is evident that his research in the archives was wide, and his accumulation of data extensive. The printed matter which he has left constitutes a sketch of a great work on the architecture of his own country, which he held before him as the objective of his life. Those who know the subject understand how noble a monument this work may still become if anyone is found with sufficient interest and genius to assume his task.

In his written work Mr. Schuyler has entered every portion of the field. In 1892 he published a preliminary book on "American Architecture" which recalls the crisp and formative period of the eighties and early nineties, when American art in all branches began to be conscious of itself and of the art of other people. At this moment Mr. Schuyler was mature, and had a large store of recollections of the past of American architecture. He was dominated, as Mr. Sturgis was, and all serious students of architecture were at the time, by the return which the civilized world was making to the method, the truth and the genuineness of medieval work. Everyone read Ruskin's books, which, with all their faults, had the heart of the matter in them; many passed on to the stronger scholarship of Viollet-le-Duc and the medievalists of France and Germany. The book of 1892 is full of the pleasant and human phrases of the day, which express the conviction that architecture, after all, is building, and that the verities of construction are fundamental to the normal development of style.

The medieval doctrine of that or, rather, of the previous period always tempered Mr. Schuyler's judgment, and made him amiably antagonistic to the results of the teaching of the classic school.

Since the publication of Mr. Schuyler's book in 1892, American architecture has expressed itself in a large way. It has been mainly classic, and true to the modern Parisian standards, and seems now to be making a healthy return to the arrested Colonial period.

In Notes and Comments of the ARCHITECTURAL RECORD for March, 1906 (vol. xix), there is an article by Mr. Schuyler on the "Education of a Colonial Carpenter," which is probably the only general treatment of this subject. It is invaluable as a sketch of the development and sources of culture of the people who executed the fine old American buildings, and leaves in the mind of the reader a keen regret that instead of two pages and a half of fundamental material Mr. Schuyler was not permitted to develop his information in a good octavo volume, which may now never be printed.

Farther treatment of the Colonial period is to be found in the "History of Old Colonial Architecture" in volume iv of the Record (1894-1895), the "Restoration of Fraunces' Tavern" in volume xxiv (1908), and "The New York City Hall" in volume xxiii (1908). An excellent example of the service which Mr. Schuyler was capable of rendering is the series of articles contributed to the *American Architect* in 1910 and 1911, en-

titled the "Old Greek Revival." This movement, based on Stuart and Revett's "Antiquities of Athens," which affected the entire civilized world in the early part of the nineteenth century, was most gratefully assisted by the excellent men who had been brought up on similar Colonial traditions. The list is headed by Benjamin Henry Latrobe, who is followed by Robert Mills, William Strickland, Charles Bulfinch, Ithiel Town and other clever practitioners of the time. In his treatment of this important period Mr. Schuyler is almost as sympathetic as he is in the discussion of the work of his contemporaries of the later Eidlitz period. Under his guidance one becomes enthusiastic about the Greek Revival, and is surprised to discover how valuable it is with its many fine monuments, and much good work, from the Treasury Building in Washington to the little New England churches with their wooden Doric columns.

Here again we have a sketch, suggesting a volume which Mr. Schuyler alone might have written.

There is danger of forgetting the excellent men of the generation between the Colonial and Greek Revival days and the modern, from whom Mr. Schuyler received his predispositions, and to whom he was especially loyal. He knew well Eidlitz and Renwick, Upjohn, Cady, Potter, Congdon, Wight, Harned and others; sound men of medieval training who have left good Gothic monuments in many large Eastern cities. The chief of this school was probably Leopold Eidlitz. In volume xxiv (1908) of the Record is a series of three articles by Mr. Schuyler on "A Great American Architect: Leopold Eidlitz" which reveals not only a great architect but a great critic as well. The career of Leopold Eidlitz culminated in his additions to the Capitol at Albany and especially in the Assembly Chamber. In this work he was associated with as interesting a group of men as ever were brought together in the construction of any American monument; William Dorsheimer, the Lieutenant-Governor of New York, Henry Hobson Richardson, William Law Olmstead and William Morris Hunt, the master painter, whose two lunettes on the north and south sides of the room were the most notable, as they were the earliest mural paintings of high quality in America. There are several records of this coterie, but the best is that of Mr. Schuyler, who was present at many of their conferences.

In his two articles on the Romanesque in New York and in America, published in the first volume of the Record (1891), he develops the thesis that there were "strong men before Agamemnon, and that Romanesque was not unstudied or unknown before the introduction of what everybody who is at all interested in this subject recognizes as the Richardsonian Romanesque." Appreciation of the round-arched styles came naturally at the end of the medieval movement to which we owe so many good Gothic buildings in the periods before and immediately after the Civil War; and the same men who accomplished sound results in the Gothic style were interested to rehabilitate the style from which Gothic architecture sprang. Mr. Schuyler mentions these earlier men, and discusses their work with evident sympathy. The list is headed by Leopold Eidlitz with St. George's Church and the Old Produce Exchange, in New York, and the Academy of Music, in Brooklyn. Eidlitz is followed by Renwick, Harney, Potter and others. Richardson was a great architect, certainly, but his towering personality was the major element in causing his success. Many of the leading architects of the day essayed the Romanesque style under his inspiration. How successful they were at times we may see in Mr. Schuyler's article and in the plates of the "New York Sketchbook of Architecture" (1874-6).

Richard Morris Hunt, the brother of the painter William Morris Hunt, and perhaps the largest figure in the history of American architecture, was of the generation of Eidlitz, Renwick and Upjohn; but as his training was thoroughly French and his convictions entirely in line with the conventions of classicism,

he is better placed with the later generation, which was evolved from Parisian training. It is characteristic of the loyal Americanism of Mr. Schuyler and of his sound medieval convictions that his appreciation of Hunt, expressed in his article in volume v (1895-6) of the Record, is not as keenly felt as is the treatment of Eidlitz and his work in volume xxiv.

Mr. Schuyler regrets in his amiable way that Hunt did not remain in America to assist his contemporaries in their attempts to revive medieval architecture.

The World's Fair at Chicago was the formal introduction of the new school of architects, who, trained in Paris, have done so much to bring us into sympathy with the École des Beaux-Arts.

Most of us have now pinned our faith to classicism in some form, and swear by Piranesi: but to all this Mr. Schuyler was temperamentally antipathetic. He treats the wonderful Chicago ensemble of 1893 in a characteristic manner; generously conceding the splendid results, but pleasantly suggesting the doubt, whether, after all, the result of this vast experiment will be permanently beneficial. We have gone far enough now with the classic movement to begin to consider whether our kind friend had not some reason for his fears.

The main interest in Mr. Schuyler's work centers in his large grasp of the principles and record of architecture in America. Within the limits of this article it is only possible to show the splendid sketch which he has left, and to express the deep regret that there is no hand with sufficient cunning to raise the pen which he has laid down.

How broad Mr. Schuyler's work really was, how keen his interest in the busy men of his time, may be learned from the bibliography, probably imperfect, which we are able to append.

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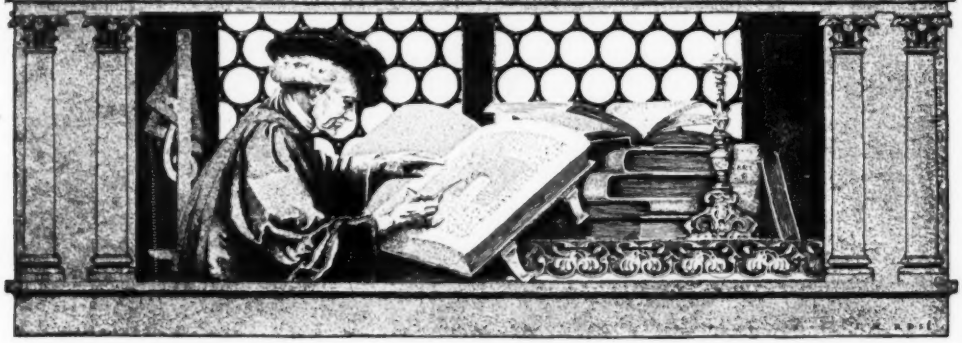


POST-ROMAN ARCHITECTURE.

By Montgomery Schuyler.

Byzantine and Romanesque Architecture. By Thomas Graham Jackson, R. A. 2 vols., ill. Cambridge University Press and the University of Chicago Press.

The student may not at first sight see the use of a new history of Byzantine and Romanesque architecture, so thoroughly have the styles that arise respectively from the division and from the disintegration of the Roman Empire been explored and explained already. But he finds that the present author has qualifications for his task which in their combination are peculiar. In the first place, he is a practical architect, which by no means every one of his predecessors has been. This means that he looks for his explanation of architectural forms where the origin of every true architectural form must be sought, in the practical problems of construction and the manner in which building materials are put together. In the next place, he is a scholar, who is capable of reading in the original tongues the history of the times and places in which his chosen architectures arose, and enough of a philosopher to apprehend the meaning of the political and religious movements, an understanding of which is as necessary to an appraisal of the monuments as is an understanding of the technical elements. In the third place, he is a traveler who has personally visited by far the greater number of the buildings he describes, and withal an excellent draughtsman, who can not only record the actual aspect of those buildings, but can make his pencil illustrate and emphasize the points made by his pen. The use of photographs is reduced to the minimum in the illustrations, to the comfort as well as to the enlightenment of the reader, who finds welcome the showing that the art of sketching is not and cannot satisfactorily be superseded by the camera. With such an equipment the author has produced a work which may be read with interest and profit even by the student who is most familiar with the wide field which he has taken for his province.

It is marvelous how the ruins of the Roman Empire underlie modern civilization in almost every phase. The succession is nowhere clearer or more important than in architecture. Byzantine and Romanesque are two divergent streams flowing from a common source. To be sure, the common source, when it is traced, is found to be Athens rather than Rome. It was from Athens that the Roman builders derived the decoration with which they overlaid the construction derived from their native Etruscan, insomuch that in the most ambitious monuments of the Empire there remains a contradiction between structure and decoration which justifies us in calling it a hybrid architecture. Yet from the Renaissance until the nineteenth century, or at least until the exploration and measurements and drawings of Stuart and Revett were published in the latter part of the eighteenth, the mixed Roman architecture was held to be pure and perfect and its remains were held up to the student as models, as indeed they continue to be even yet.

It is strange that we should be able to identify the very building in which each of the two divergent streams had its origin. No doubt there were domed churches in Asia Minor before St. Sophia. We are always to bear in mind the truth expressed by Mr. Statham in his recent "Short His-

tory of Architecture," that no building which deserves to be called a monument was ever erected except in succession to something less complete and successful which had preceded it. If Justinian's architects, who began the church and carried it to completion within six years (A. D. 532-537), had had no precedents, they would have worked a unique miracle. They came as near it as is permitted to mortals, in producing at a single stroke, a building which is still accepted as the model of its style, and which alone in the world has been in constant use as a place of worship, Christian or Mahometan, for fourteen centuries.

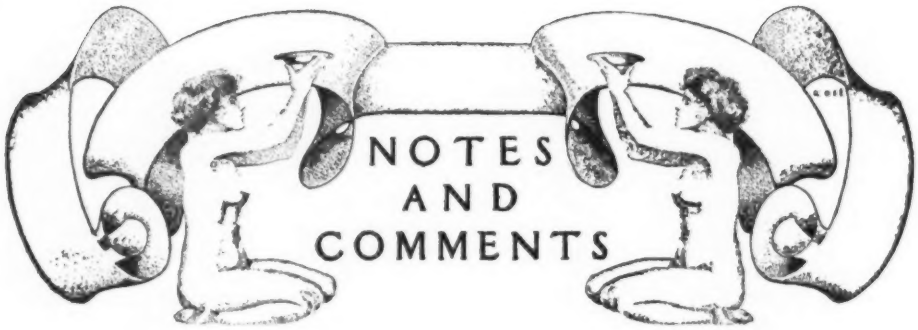
Viollet-le-Duc insists that the Byzantine architects were really "Greek Revivalists." It is likely that Greeks were employed in Imperial Rome itself to design the detail of the decorative trellis of the orders with which the arched structure of the Roman engineers was overlaid. But it was the engineer and not the decorator who was the real architect. At Constantinople the two capacities were united in the same person, as they always must be if anything lasting and vital is to result. The artist in the age of Justinian applied himself to rationalize and refine the expression of the arched construction, just as in the age of Pericles he had applied himself to rationalize and refine the expression of the construction of column and lintel. As has been said, the hybrid Roman architecture was a fetish from the fifteenth century to the nineteenth. Gibbon, writing in the middle of the eighteenth, remarks of Diocletian's palace at Spalatro, on the eastern shore of the Adriatic, erected early in the fourth century, that "we are informed by a recent and very judicious traveler that the awful ruins of Spalatro are not less expressive of the decline of the arts than of the greatness of the Roman Empire in the time of Diocletian," the recent traveler being very likely Adam, whose "Dalmatia" was published in 1764. In fact what in the eyes of the purists of that period constituted the decline of architecture exemplified in this edifice was that it disregarded the conventional hybridization of the Imperial Roman architecture and undertook to disengage its elements and rationalize its construction. It was the earliest building, according to M. Choisy, quoted in this present work, in which the column, in place of overlaying an arched wall with its accompanying entablature, was made to fulfill a structural function by actually supporting the arch, and a colonnade was made to carry an arcade. That rationalization of the combination of column and arch was the beginning of Romanesque architecture, and of the decline and fall of what Gibbon calls "the arts," but what Freeman, taking the bull by the horns, as usual, more accurately describes as "the Classical or Transitional Roman," which, in fact, it was.

Bearing in mind Mr. Statham's useful admonition, we cannot regard Sta. Sophia itself as springing like a Minerva full-armed from the brain of its progenitor, nor even the Byzantine style, of which it was the culmination, as original in the sense of being underived. The origin of the domed style, that is of the true dome as a circular superstructure on a rectangular base, is doubtless to be sought in the remains of the Sassanians in Persia. Except for containing this germ, those remains are of comparatively little architectural importance. It yet appears that it was from Persia that the domical construction made its way northward to Asia Minor and the European mainland. It almost equally appears that the Eastern Empire repaid its debt with interest in furnishing the model which afterwards became that of the Mahometan mosque. Although Sta. Sophia was nine hundred years old when the capture of Constantinople converted it from a church into a mosque, there was no such sense of incongruity on the part of the new worshippers as would have been incurred if it had been a Gothic instead of a Byzantine church. They found themselves quite at home in a building which had so much in common with the mosques of Egypt, of Spain, and of India, that it may well have seemed, and indeed may well have been, their prototype. For it is to be remembered that Sta. Sophia was completed before Mahomet was born. The Arabians had built nothing at home. When they began to rear monuments they were compelled to go abroad for models. As Carlyle has it, within one century after Mahomet's death, "Arabia is at Grenada on this hand, at Delhi on that: glancing in valor and splendor and the light of genius. Arabia shines through long ages over a great section of the world." Of the monuments of this Arabian architecture, at least of the domed monuments, while the germ came from the Persia of the Sassanians, in itself "post-Roman," the unequalled development of it at Constantinople may well have been brought to the notice of the Saracenic dome builders, and Sta. Sophia may be considered the ancestor of the Taj

Mahal as well as of St. Mark's at Venice. Byzantine made its way as far westward as southern France, where the domes of Perigeux are reminders of the Byzantine plan, and all the famous Provençal churches of Byzantine decoration. The style has special claims on American attention, since the detail of "Richardsonian Romanesque" is essentially Byzantine, while the plan of the Byzantine domed church has commended itself as more available than the plan of the "long drawn aisle and fretted vault" of the pointed Gothic for the purposes of a modern Protestant "auditorium church." Interesting essays have been made toward its adaptation to these uses, one of the most interesting being the admirable St. Paul's Chapel of Columbia University.

The history of Byzantine and Romanesque between them comprises the history of arched architecture, as that of the classic styles the history of columnar architecture. As our author puts it, "the vault is only the arch prolonged sideways, and the dome is the arch rotated on its axis." If the detail of the chapters devoted to Romanesque are, upon the whole, of a less fresh and lively interest than those of the chapters given to Byzantine, it is in part because the subject has been so thoroughly discussed by previous writers, and in part because it is, at least in some of its phases, of less intrinsic interest. Mr. Jackson admits that the "early Christian" architecture of churches of which the plan is derived from that of the Roman basilica, and in which the ambition of the builders did not go beyond roofing with timber a nave of moderate span, with a flat ceiling hung from the roof-timbers, makes a rather tedious and monotonous story. The most interesting of the churches of the early Romanesque in Italy are those which owe much of their interest to the influence exerted by the Byzantine architecture upon their detail and decoration. When the Romanesque builders had their ambition aroused to the point of covering, first the aisles and ultimately the nave, with a fire and time-proof ceiling of masonry, when they really tackled a new problem, then indeed the recital of the difficulties they encountered and of the devices they employed to overcome those difficulties becomes of great and increasing interest. Their efforts culminated in the groined vaulting of the thirteenth century, with its buttress system. But the expression of the resultant works was so entirely different from that of the preceding monuments of the Romanesque that that very judicious critic, Mr. W. P. P. Longfellow, has deliberately omitted Gothic from his consideration of "The Column and the Arch" as being "out of line" with the general architectural development. Indeed, what may be called a Gothic development of the buttress system is as applicable to the domed as to the vaulted construction. Mr. Jackson points out that the huge outlying piers which take the thrust of the dome of Sta. Sophia are in their function flying buttresses. It would be most interesting to watch the progress of an effort to develop and refine what the Byzantine builders left as brute masses, in the spirit of the Gothic builders who insisted upon expressing and expounding every structural expedient they found themselves compelled to employ. But this achievement seems to have been left to the modern architect who busies himself with the revival of Byzantine, and if Byzantine comes into use for the purposes for which it is "indicated," some revivalist may have courage and ambition enough to attempt that task.

However all this may be, Mr. Jackson's account of the Romanesque is as intelligent and as intelligible as his account of the Byzantine. There can be very few students who will not learn from his clear explanations more than they knew before about the relations of the Romanesques of Venetia, of Lombardy, of the Rhine, of southern France, and of northern France, whether in Normandy or in England. It is a book for which both students and practitioners have reason to be grateful.



Signing of Buildings: an Historical Example.

Little has been said of late, for some unexplained reason, regarding the advantages or disadvantages of the adoption of some general practice to regulate the signing of buildings by their designers; but the subject is far too important to be dropped before a final decision is reached. While everyone acknowledges that a building is often as great a work of art as any painting or statue, it unfortunately remains that, although the latter are invariably signed, and a record of their creator thus assured, it is an entirely different matter when one wishes to ascertain the name of the designer of even comparatively recent buildings. Experience has shown that the best obtainable tradition in the case of designers is often unreliable when it relates to the work of even fifty or a hundred years ago.

Errors in attribution are due to a number of causes, among which are common carelessness or mistakes; but they are more often caused by family pride or the desire to connect one's property with some great name. A New York architect, not long dead, whose work had received nationwide recognition, was once walking through a side street in a large city and saw a recently completed residence that greatly interested him. Imagine his surprise, upon asking the name of the architect, at being given by one member of the family his own name as designer!

Instances of this kind are not rare and many well known designers are credited with much work totally unknown to them and to which they have no possible claim. A case in point is the New York City Hall, built between 1802 and 1812, and of which a French architect named Mangin was the designer. It would seem that in this special case, the traditions are of a kind that no possibility of error would be imagined. But in spite of this, or because of it, a New York architect has found it necessary to spend some four years of careful and expensive research to substantiate with documentary and other contemporary evidence the fact that Joseph F. Mangin, and not John McComb, was the real designer of the City Hall, in spite of all family traditions in favor of McComb, to the contrary. With buidings, either American or foreign, of more remote periods the problem becomes, of course, a far more serious one.

Other precedents for an inscription stating the architect's name, and the date of erection, than the already well known arguments are hardly necessary, but an interesting example of the practice of "signing" among early architects is found in the following extract from "The Diary of John Evelyn, Being a Part of His Account of a Visit to Calais in November, 1640": "I remember there was engraven in stone on the front of an ancient dwelling which was shew'd us, these words in English, 'God save the King,' with the name of the architect and date."

John Evelyn has passed away these many years and the house he mentions has probably "gone to dust" as well—even his "Diary," his work on "British Architects," and his "Treatise on Gardening" are all but forgotten. But architects should appreciate his record of this bit of the architectural practice of the "good old days." The only possible fault that one could find with his account is that he did not record for us the name of that long gone English architect.